

Talgo

talgo.com

Annual Report 2022



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About Talgo

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1.1 Letter from the chairman

Since 1942, Talgo has been a benchmark for innovation and a leader in the passenger transport sector



Dear shareholders

The year 2022 was very special: not only because it marks the 80th anniversary of the founding of Talgo, but also because of the circumstances in which the company carried on its work in recent months. For eight decades, Talgo has been guided by the highest standards of social and corporate responsibility, while working to become the company it is today: a global technological benchmark, recognised for its capacity for innovation, its unique, distinctive technology and reliability with a range of sustainable high-speed, long and medium distance trains that are designed and manufactured entirely in Spain. Throughout these years, the company's vision and development have been marked by ambitious but sustainable growth. This has been accompanied by social responsibility actions that have contributed to improving the environment in which the company operates.

Talgo's resilience has been tested in the past year, as it has faced a challenging environment marked by volatility in the cost of raw materials, disruptions in global supply chains and inflation. These three factors were responsible for a tighter result for the year than in the past, but also a challenge that the Group faced with determination. Already, in the second half of the year, a recovery began that will be felt in 2023.

The swift response of the management team, which devised an efficient and effective action plan, successfully brought costs under control and stabilised margins. Price volatility and supply chain and logistical problems were challenges that Talgo

had to adapt to. But at the same time, the geopolitical situation exploded with the conflict in Ukraine in March and led to the cancellation of services in Russia.

Despite all this, Talgo managed to turn the situation around and return to the path of growth, with great prospects for 2023. Talgo posted adjusted EBITDA of 52.5 million euros in 2022 and net profit of 1.4 million euros, figures that are undoubtedly lower than 2021, but which also show that even in the most adverse situations, our business model is solid, sustainable and resilient in a key industrial sector for the economy.

If 2022 was a year for overcoming economic challenges, it was also a year of progress and consolidation of the company's corporate sustainability. The approval of the 2022-2024 strategic plan for sustainability and responsibility kicked off key organisation-wide projects aimed at building sustainable and responsible management; strengthening governance and preventive business management; systematically increasing the organisation's capabilities; developing people and generating a positive employment footprint; advancing environmental sustainability and sustainable mobility; supporting the development and strengthening of society; analysing, disseminating and improving sustainable and responsible management. I invite you to learn more in the full 2022 Sustainability Report, which is now available. Find out about the depth of the changes that Talgo has undertaken, which, once again, has managed to adapt to a marketing setting in which non-economic criteria

1.1 Letter from the chairman

are increasingly key for railway operators. These include energy efficiency (hydrogen and electricity), the use of recyclable materials in manufacturing and sustainable maintenance management.

The change, furthermore, is not only at the business level. The plan is having an impact across the entire organisation, starting with the Board of Directors, which has been reduced to 10 members with the aim of placing Talgo on an equal footing with other listed companies of similar size, in line with best practices of good governance.

At the same time, Talgo believes that human capital is essential to the company's success. It has focused on diversity, promoting talent and enhancing employment stability as a means of enriching the internal culture to optimise productivity and as an essential mechanism for maximising our staff's levels of motivation and satisfaction. The launch of more than 200 job vacancies reflects the company's interest remaining one of the driving social and economic forces where it operates, but also being a place where its employees can develop their professional and personal careers, reflected in a 91% permanent hiring rate by 2022. I would also like to thank all of them for the work and professionalism they show on a daily basis. They are a crucial ingredient in attaining company's results and ensuring the prestige of its unique technology in the world.

Since 1942, Talgo has been a benchmark for innovation and a leader in the passenger transport sector. And I have no doubt that the changes undertaken in 2022, combined with our outstanding management and staff team and solid and



resilient business model, supported by our shareholder – who I have to thank for their support for Talgo, even in the most difficult times – the company's now 80-year history is only the beginning. Talgo will continue to be a global technological benchmark that is recognised for its capability for innovation, unique and distinctive technology and reliability, providing customised and benchmark solutions for sustainable mobility, efficiency, safety, innovation and responsible business.

Sincerely,

Mr Carlos Palacio Oriol

Chairman of the Board of Directors

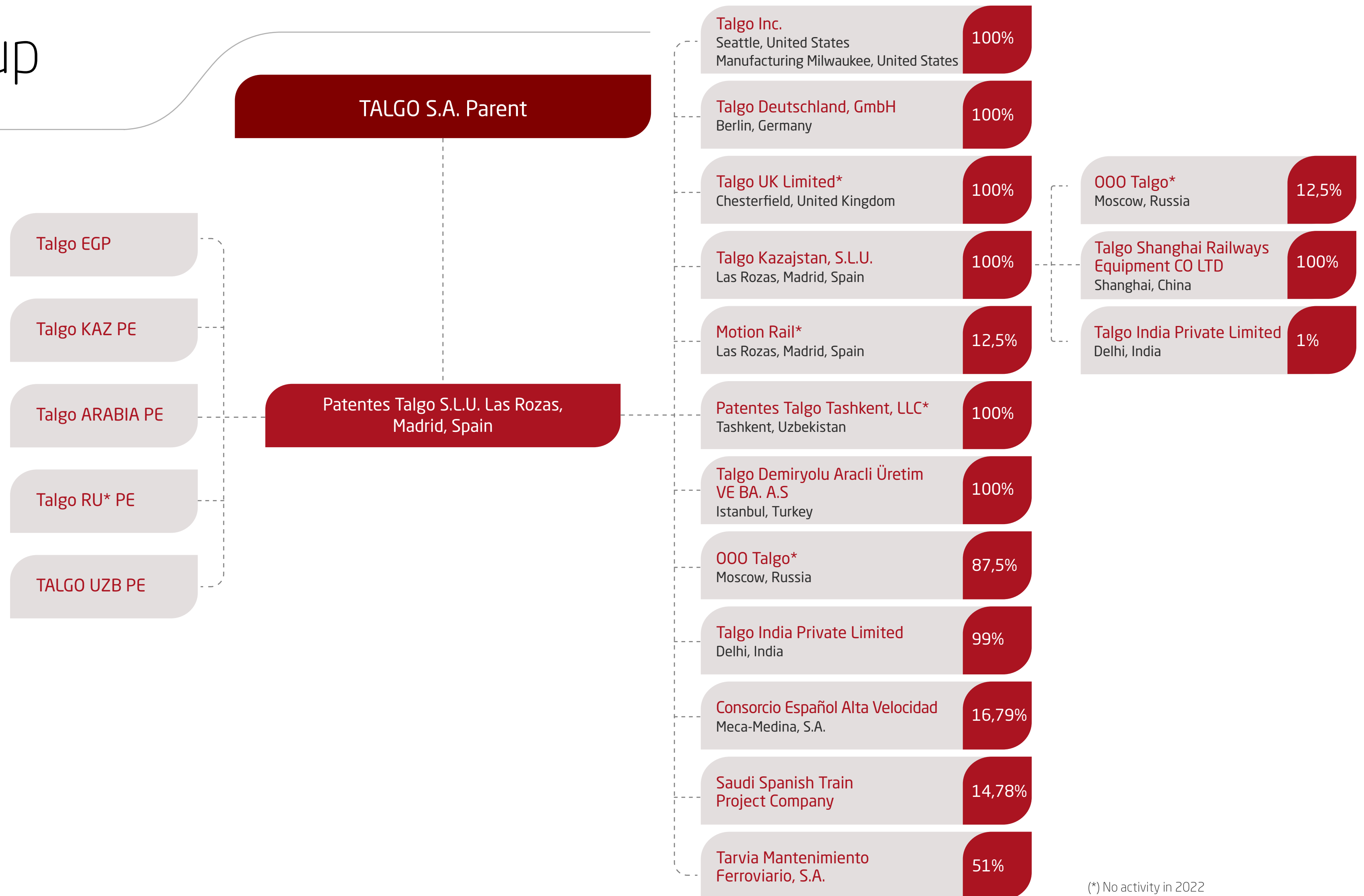
1.2 Scope of the Group

The Talgo Group is made up of a group of companies set up to provide a worldwide response to the needs of sustainable mobility in the railway sector.

Talgo S.A. consolidates all the Group's companies, the latter's activity being centred on the holding of 100% of the shares of Patentes Talgo S.L.U. Talgo S.A. shares are listed on the Spanish stock market.

Patentes Talgo S.L.U. consolidates all the Group's operating companies in accordance with the control criteria established by accounting regulations, the scope of consolidation of which is explained in the consolidated financial statements of Patentes Talgo, S.L.U. and subsidiaries for 2022.

Activities in Russia came to a complete halt in March 2022 due to force majeure, and at year-end the company had no activities and no active employees there.



(*) No activity in 2022

1.3 Significant events of the year



- | January | February | March | April | May | August | September | October | November | December |
|---|---|---|---|---|--|--|---|--|---|
| <ul style="list-style-type: none"> • SHYNE: the emergence of Spain's largest consortium to promote renewable hydrogen. ➤ | <ul style="list-style-type: none"> • EIB and Talgo sign 35 million euro green loan to finance their innovation strategy. ➤ | <ul style="list-style-type: none"> • Talgo and the Fundación de los Ferrocarriles (Spanish Railway Foundation) renew their partnership. ➤ • Talgo approves dividend of 10 million euros through a Flexible Dividend Programme. ➤ • Indra and Talgo join forces in Europe's Rail, the largest railway innovation programme in Europe, aimed at pursuing sector digitalisation and sustainability. ➤ | <ul style="list-style-type: none"> • Talgo develops new tracks for very high speed trains and reduces their weight by 50%. ➤ | <ul style="list-style-type: none"> • Talgo launches Share Buyback Programme and increases shareholder earnings per share. ➤ • Talgo supports national talent and engineering at UPMDay22. ➤ • Talgo begins dynamic testing of Spain's first dual hydrogen train. ➤ | <ul style="list-style-type: none"> • Talgo wins new 280 million euro contract in Egypt. ➤ | <ul style="list-style-type: none"> • Talgo beats record in Galicia and reaches 360 km/h between Ourense and Santiago. ➤ • Completion of the Buyback Programme and Execution of the Capital Reduction Programme. ➤ • Deutsche Bahn chooses Talgo to design the German train of the future. ➤ • Talgo presents in Berlin its Intercity train platform and new rail solutions to decarbonise transport. ➤ | <ul style="list-style-type: none"> • Talgo launches a historic job offer: it is seeking to recruit more than 200 new technical staff for its plants throughout Spain. ➤ • Talgo and its unique technology celebrate their 80th anniversary. ➤ | <ul style="list-style-type: none"> • Talgo announces the winners of the 2022 Women in Engineering Excellence and Technological Innovation Awards. ➤ | <ul style="list-style-type: none"> • Talgo signs the Diversity Charter. ➤ • Talgo commences operation of its Intercity trains in Egypt. ➤ |

Subsequent events

- LE TRAIN signs an agreement with Talgo for the development of a fleet of high-speed trains. ➤
- Denmark confirms its confidence in Talgo's intercity trains to decarbonise the transport system. ➤
- Deutsche Bahn confirms Talgo's largest ever order: 56 new Talgo 230 trains worth some 1.4 billion euros. ➤

1.4 Main financial results

The current international environment, which is marked by volatility in the price of raw materials and disruptions in global supply chains and inflation, were the main factors affecting Talgo's business in 2022.

Overall, the Group achieved revenue of 469.1 million euros in 2022, down 15.5% compared to the previous year (555.4 million euros) due to the slower pace of execution of manufacturing projects caused by delays in the supply chain. However, the projections for 2023 are optimistic foresee quicker progress in the company's ongoing projects, resulting in an increase in revenues, along with steady improvement in margins. In addition, the Group continues to implement its cost control action plan, with the objective of improving competitiveness and flexibility in order to reduce the effect of inflation on the current order book.

Talgo posted adjusted EBITDA of 52.5 million euros in 2022, down 20.7% from the 66.2 million euros of the previous year, due to economic factors such as inflation (higher than budgeted costs) and delays caused by the supply chain (longer working hours), which mainly affected manufacturing projects and led to a reduction in expected margins for the year. The mitigation action plan implemented is already

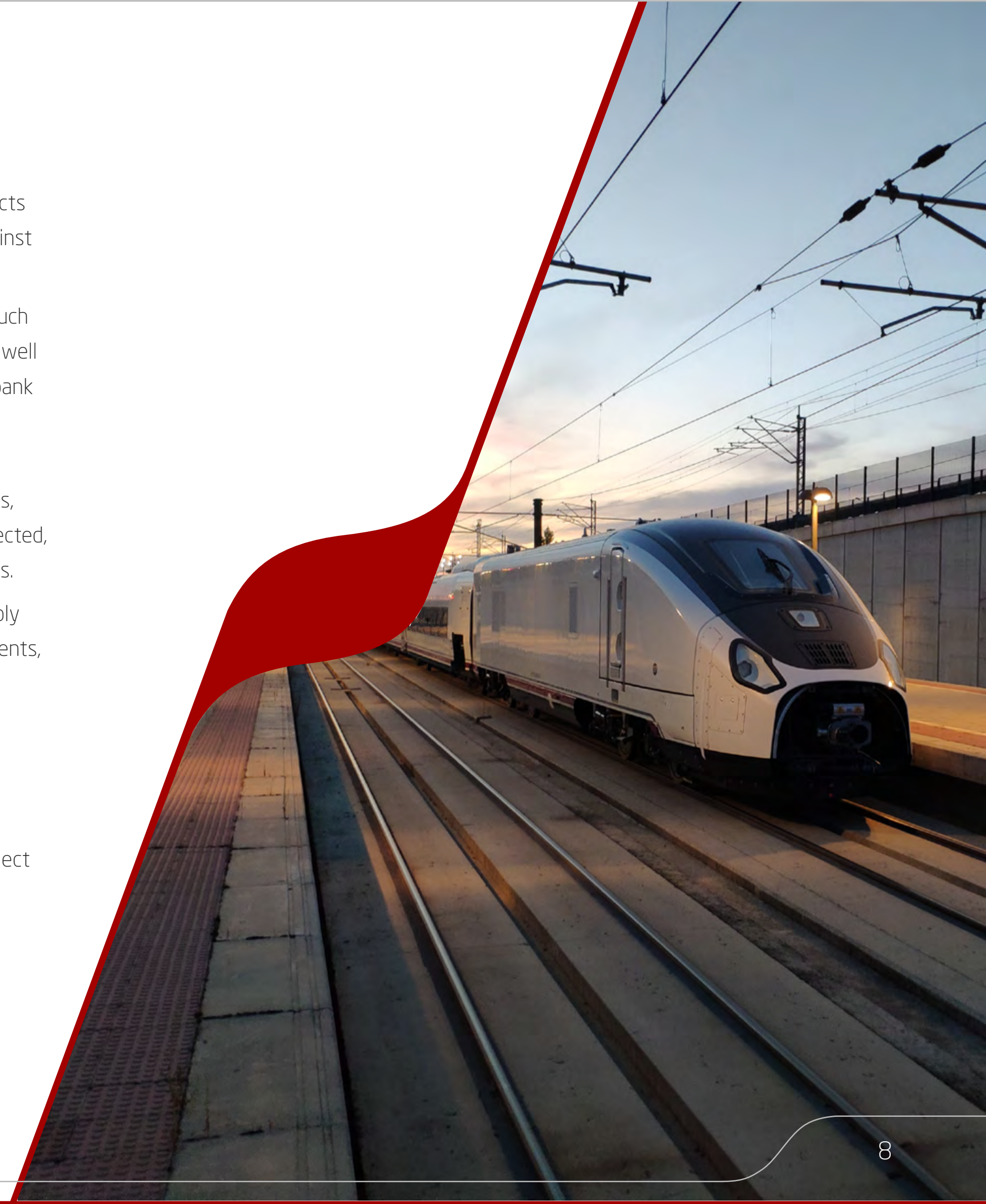
Rising commodity costs, disruptions in global supply chains and inflation were factors affecting 2022 results.

visible, with margins stabilised and recovering. In addition, maintenance contracts include indexation clauses to adjust prices annually and protect the Group against similar scenarios going forward.

Net profit amounted to 1.4 million euros in 2022, impacted by one-off items such as the closure of Russia and the reversal of tax losses at the US subsidiary, as well as higher financial expenses due to the impact on the cost of debt of central bank rate hikes.

Operating cash requirements at year-end 2022 amounted to 217.3 million euros due to temporary natural figures in the cash requirements of the projects, although these requirements decreased in the second half of the year, as expected, reflecting the volatility of cash flow during the execution period of the projects.

The current manufacturing cycle, together with the delays caused by the supply chains in the period, resulted in higher investments in operating cash requirements, thus offsetting the adjusted EBITDA generated in the period. The volume of operating cash requirements at year-end 2022 mainly reflects the degree of progress of projects and outstanding receivables, the risk profile of which is considered low (low technical and collection risk). In 2022, the rescheduling of projects led to a lower degree of progress resulting in delays in collection milestones and consequently higher inventory levels. The very high-speed project



1.4 Main financial results

in Spain, whose fleet is now fully completed and pending certification, was the main driver of working capital in the year, pending test approvals that will trigger deliveries and consequent cash inflows.

Capex amounted to 21 million euros in the period, in line with what was planned at the beginning of the year, of which 74% corresponds to R&D activities and 12% to capacity additions.

With regard to financial debt, 2022 was a turning point in the funding market, driven by a tough monetary policy implemented by central banks with the primary objective of mitigating inflation. Talgo, for its part, issued excess debt during 2021 and early 2022 in anticipation of this scenario. As a result, leverage at year-end stood at 1.9 times adjusted EBITDA (97.4 million euros of net debt). It is still noteworthy that, of the Group's total long-term financial debt, 64% is at a fixed rate, with an average cost of 1.7% and an average maturity of 2.5 years. However, the recent rate hikes will impact the financial outcome of future new debt issuance and the structure of project financing.

At the same time, Talgo's high financing capacity at year-end should be noted, with more than 400 million euros of liquidity (cash, credit lines and project-based financing lines) that allow the company to reliably finance current and future projects.

2022 Action Plan

The need to address the adverse environment and operational challenges led the company to design and implement an action plan to control costs and help stabilise margins on manufacturing projects.

The main operational challenges were countering inflation and commodity price volatility, as well as supply chain disruptions. Thus, Talgo's industrial capacity had to be adapted to this situation in order to optimise its operation, in addition to dealing with other extraordinary challenges that occurred during the year. These included cancellation of services in Russia in March 2022 (representing less than 1% of revenue) and the termination of the contract by the customer LACMTA in the US, which is currently in the process of litigation.

The results of the 2022 action plan were visible in Q2 and will allow for a return to growth by 2023.

Accordingly, various actions were undertaken, such as:

- Update of the wage base agreed with the unions for 2021-22 (9.2% over two years).
- >70% of the order book covered by indexation clauses.
- Customer/supplier back to back policy to reduce price volatility.
- Customer pass-through with indexation clauses.
- Hedging strategies.
- Increasing the universe of suppliers to enhance flexibility.
- Supplier relocation strategy to promote agility and secure supply.
- Strengthening requirements and guarantees to ensure performance.
- Re-planning in existing manufacturing projects.
- Standardisation of products and manufacturing processes to optimise production lines and development.
- Alternative structures to reduce the volatility of working capital.

Main 2022 results

Revenue (€m)



Quarterly revenue performance

Revenue (€m)



	2020	2021	2022
Adjusted EBITDA (€m)	34.2	66.2	52.5
Adjusted EBITDA margin (%)	7.0%	11.9%	11.2%
Net profit (€m)	(17.4)	27.5	1.4
Net profit margin (%)	(-3.6%)	5.0%	0.3%
Free cash flow (€m)	(100.6)	16.4	(32.2)
Investments - Capex (€M)	24.7	25.1	21
Net financial debt* (€m)	48.1	35.9	97.4
Net financial debt/EBITDA (x)	1.4x	0.5x	1.9x

* NFD = Non-current financial debt + Current financial debt - Cash and cash equivalents

2

Talگو's business

- **2.1** Profile, identity and commitments
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2.1 Profile, identity and commitments

While celebrating the 80th anniversary of its founding in 1942, Talgo pursued three lines of business in 2022:

- 1 The design and manufacture of high-speed and very high-speed, long-distance and regional trains.
- 2 Manufacture of maintenance equipment.
- 3 Provision of maintenance services to railway operators worldwide.

It has its own technology and an innovative character that allow it to achieve the highest levels of quality, availability, reliability, safety and respect for the environment in all its products, while always remaining at the forefront of railway technology.

Corporate details

Name
Talgo, S.A.

Address
Paseo del tren Talgo, 2 28290 Las Matas - Madrid, Spain

Telephone
(+34) 91 631 38 00

Website
<https://www.talgo.com/>

Share capital
37,156,169.93 euros

Number of shares
123,442,425

Activity
Manufacture of rail vehicles, components and equipment, as well as light maintenance and refurbishment services.

Markets
Talgo is present in eight countries: Spain, Germany, Denmark, Saudi Arabia, Egypt, the US, Kazakhstan and Uzbekistan; and it is listed on the Madrid, Barcelona, Valencia and Bilbao stock exchanges.

Centres of activity

Head office Las Matas, Madrid.

Factories as Matas II and Rivabellosa (Spain).

Maintenance bases in Spain Las Matas I, Fuencarral, San Andrés, Can Tunis, Málaga, Santa Catalina, Valladolid and La Sagra

Maintenance bases abroad Germany, the US, Kazakhstan, Uzbekistan and Saudi Arabia.

Activity

Manufacturing

- Trains, locomotives and coaches, bogies and wheelsets.
- Refurbishment of own and third party vehicles.
- Maintenance equipment: pit lathes, equipment for measuring wheel parameters, gauges and trolleys.

Maintenance

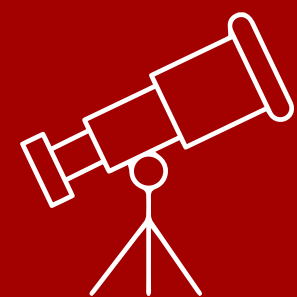
- Integral and personalised maintenance activities, including, among others, the care, overhaul, repair and complete overhaul of own and third-party trains.

2.1 Profile, identity and commitments



Mission

To be the leading company in the Spanish railway sector, with an international industrial presence, recognised worldwide for its capacity for innovation, technology, quality, reliability and the added value of its products and services.



Vision

To be a supplier of products and services capable of implementing comprehensive and innovative solutions in new segments and markets.

Technological innovation

We foster an open work environment that promotes personal initiative and creativity. Technological development and the contribution of originality and added value to our products and services are the essential features of our corporate personality.

Identification and commitment

We are proud to belong to Talgo as a company of worldwide prestige. We share its contributions and achievements to which we all contribute with our dedication and personal commitment.

Integrity

We combine our economic, social and environmental objectives, reconciling the goals pursued by the company with those of society and the family. We fulfil our commitments to society by conducting our business activities within a framework of the utmost honesty. Our employees act with integrity and loyalty that promotes mutual trust and personal esteem.

Staff health and safety

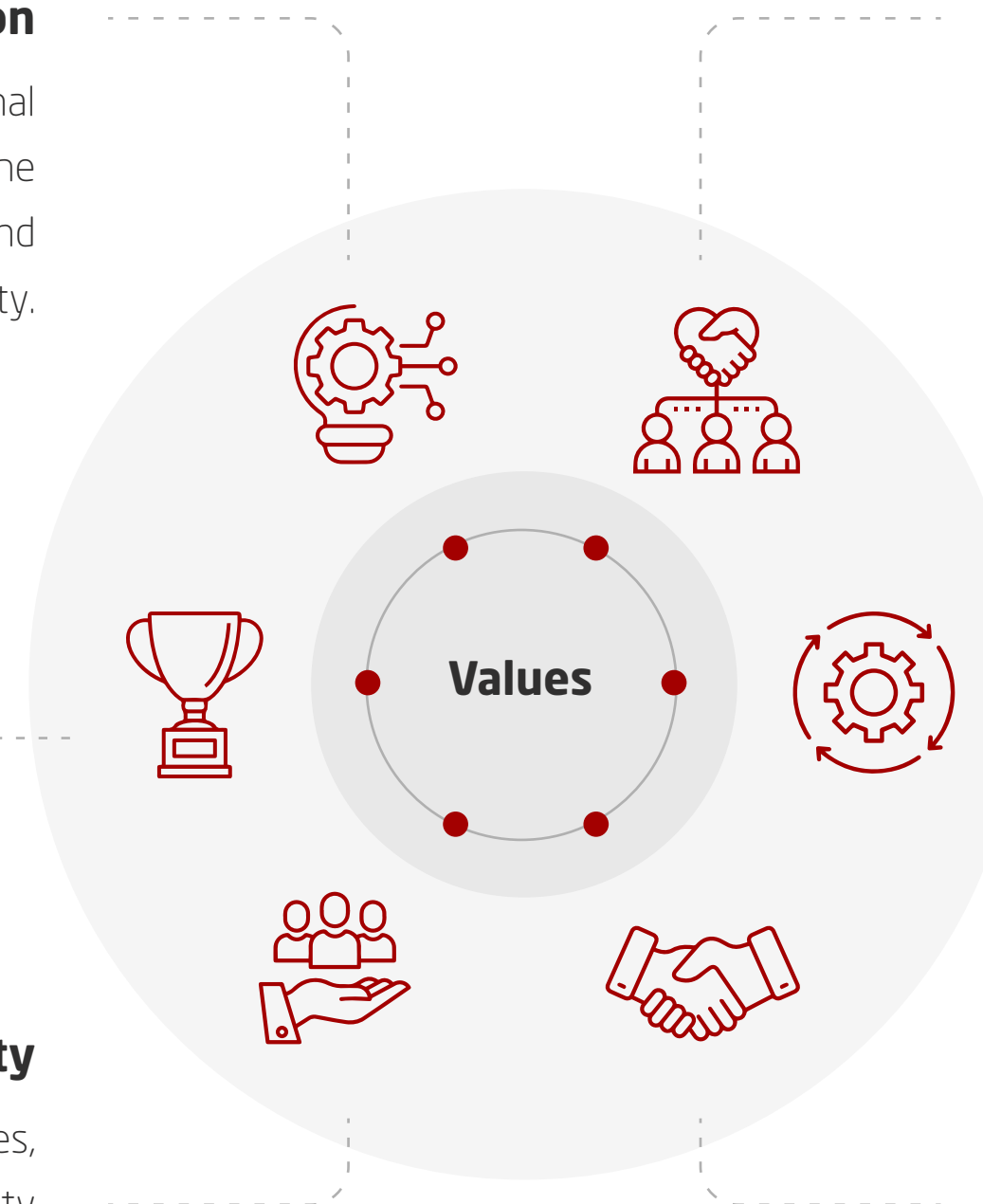
We look after the well-being and health of our workers by integrating safety, prevention and occupational health aspects into the overall management of the company. Our commitment is focused on ensuring that all workers carry out their activities under safe conditions and in healthy work environments.

Professional Development

We are constantly concerned about the development and improvement of our professionals, a job well done and ongoing improvement.

Customer service

We strive to provide our customers with innovative, high-quality products and services that meet their needs and expectations. We establish long-lasting cooperative relationships with our customers to support their business success. We take on the customer's objectives as our own, meeting their needs immediately and efficiently.



2.1 Profile, identity and commitments

Talgo worldwide

Europe

- Austria
- Belgium
- Denmark
- Germany
- Ireland
- Luxembourg
- Norway
- Portugal
- Switzerland
- Ukraine
- Belarus
- Bosnia and Herzegovina
- France
- Hungary
- Italy
- Netherlands
- Poland
- Spain
- Turkey
- United Kingdom

Asia

- China
- Indonesia
- Kazakhstan
- South Korea
- Uzbekistan
- India
- Japan
- Qatar
- Saudi Arabia
- Thailand

North America

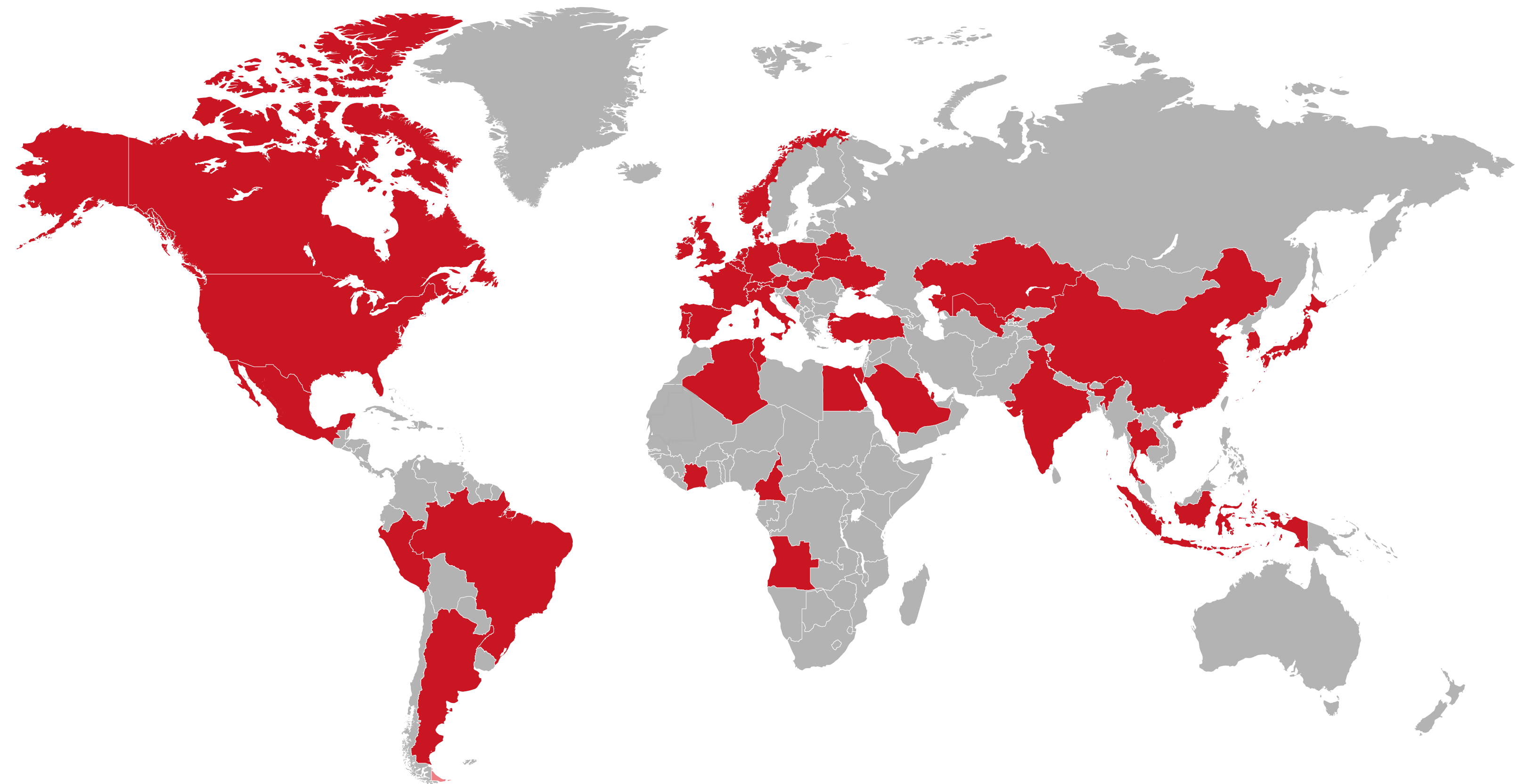
- Canada
- United States
- Mexico

South America

- Argentina
- Peru
- Brazil

Africa

- Algeria
- Cameroon
- Ivory Coast
- Egypt
- Tunisia



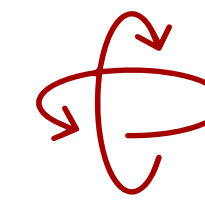
2.2 Business model

Talgo's activity is focused on the **design and manufacture of top quality trains, as well as the supply and provision of equipment and maintenance services** for railway operators all over the world.

The Group's business model aims to deliver long-term value to its stakeholders. It is underpinned by a solid financial model focused on steadily increasing turnover and maintaining attractive returns for shareholders; and by a sustainable model that maximises efficiency and social commitment while reducing the environmental impact of its activities.

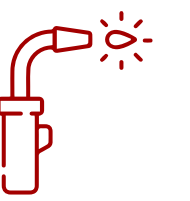
Talgo's business model: hallmarks of its identity

Industrial flexibility



Low capital-intensive model (low investment in fixed assets, high flexibility and outsourcing) and focuses its resources on design, engineering, selective manufacturing of high value-added components, assembly, delivery process and after-sales service.

Efficient light structure: outsourcing



Talgo outsources most of the supply chain, manufacturing only the essential components related to Talgo specifications and particularities (welding of critical steel and aluminium structure and rolling elements).

Ongoing learning



The company's engineers receive all the necessary feedback to improve the technology and design of the components, so that they can incorporate these advances continuously into all trains, both in the maintenance and manufacturing phases.

Commercial selectivity



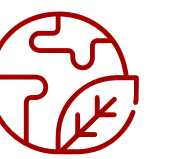
Selection of potential commercial opportunities, through an exhaustive analysis based on three pillars: attractive margin, contractual scope that provides the necessary guarantees and security and a reasonable cash profile in line with the project's risk profile.

Commitment to motivated and engaged staff



Nurturing talent and promoting training as a means to improve productivity, to add value to both the employee and the company, to generate a competitive advantage in the market and to create a motivated, responsible staff committed to Talgo's values.

Committed to sustainability



Decarbonisation, business ethics, safety, reliability and quality define our industrial activity and our management systems. We are committed to sustainability and social responsibility as travelling companions and value drivers of our activity. We conceive and apply them in an increasingly consolidated way.

2.2 Business model

As a supplement to this model, Talgo uses a specific process to analyse and specify its sustainability context, which is described both in the [Corporate Sustainability Report / Annual ESG Report](#) available in its 2022 edition through the [investor portal](#) as well as the document "Business model, fundamental analysis and sustainability context of the Talgo Group".

Talgo has a broad portfolio of products that are adaptable to customer needs and linked to medium and long distance segments with high and very high speed trains, state-of-the-art passenger coaches and regional and commuter trains to continue boosting its growth in the sector.

In recent years the group has strengthened its strategic position by investing in the development of new products to meet the needs of the market, with a particular focus on the manufacture of more efficient trains with higher capacity.

Proprietary products and technologies

Very high speed (from 250 km/h)

Talgo Avril includes a range of technologies and shows that the Group's skills are available to only a few manufacturers worldwide. Innovation aimed at maximising capacity and minimising operating costs ahead of competitors, with the particularity of including proprietary technology such as the equipment of the change of track gauge.

High speed (up to 250 km/h)

The Talgo 250 range trains have proven to be the most reliable and cost-effective option for operators looking for equipment designed for accelerated rotation both on networks that have been partially adapted to high-speed and on conventional lines that have not been adapted.

Intercity - passenger coaches

Leading manufacturer of complete train sets for long-distance services on mainly conventional infrastructure. The Talgo 230 (DB and DSB in Germany and Denmark) has established itself as a flexible and efficient benchmark product in the European market. Talgo technology offers very low operating and maintenance costs and is also fully adaptable with its own technological solutions, such as natural tilting or Talgo bogies.

Regional and commuter rail

Talgo has developed the Vittal platform in-house, which is designed for high-frequency commuter and regional services around major cities. The excellent power-to-weight ratio improves acceleration and braking coefficients, while its unbeatable accessibility helps to cut the time spent on loading and unloading operations at each station.



2.2 Business model

Proprietary and differential technology

Talgo's objective is to offer operators a product that allows them to cover more needs, and with a better cost-effectiveness ratio than other manufacturers, based on a technological paradigm built on six main principles.

Continuous low floor

Talgo trains reduce loading and unloading times by 20% and provide maximum autonomy for people with reduced mobility.

Independent and guided rolling

The only manufacturer with a system in which each of the two wheels on the axle can rotate at a different speed.

Lighter and wider coaches

The use of aluminium alloys and the reduced length of each coach maximises capacity with wider vehicles.

Natural tilting

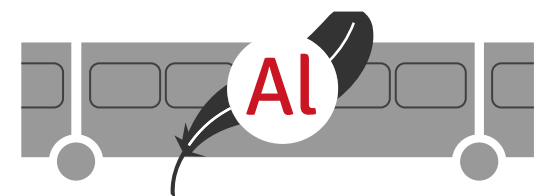
Talgo's pendular technology allows for a 25% increase in speed on curves without additional investment.

Change of gauge

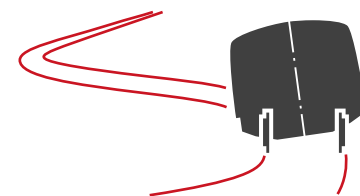
A distinguishing feature that makes the company's trains the only solution capable of adapting to any railway network and of transparently crossing all borders.

Fully articulated trains

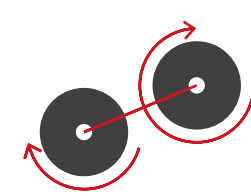
It reduces the cost of rolling stock maintenance, improves reliability and allows for more frequent interventions on the train, but it also increases safety.



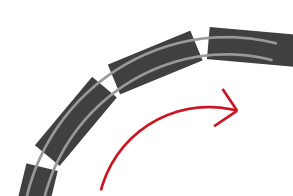
Lightweight aluminium construction



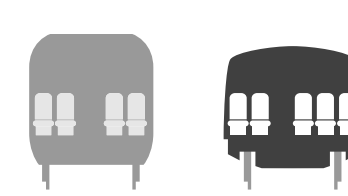
Natural tilting



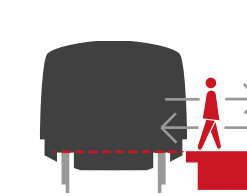
Mono-axle articulations and wheelsets



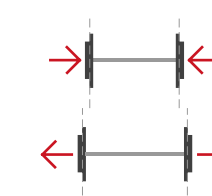
Shorter cars to better suit the headroom profiles



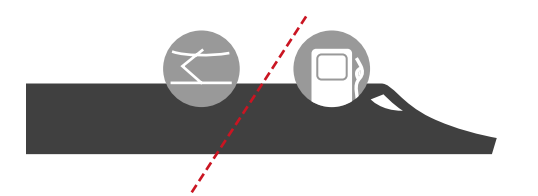
Wide-bodied cars offering increased capacity on a single floor



Platform level access



Automatic variable gauge system and independent guided



Hybrid traction technology

2.3 Industrial activity and services

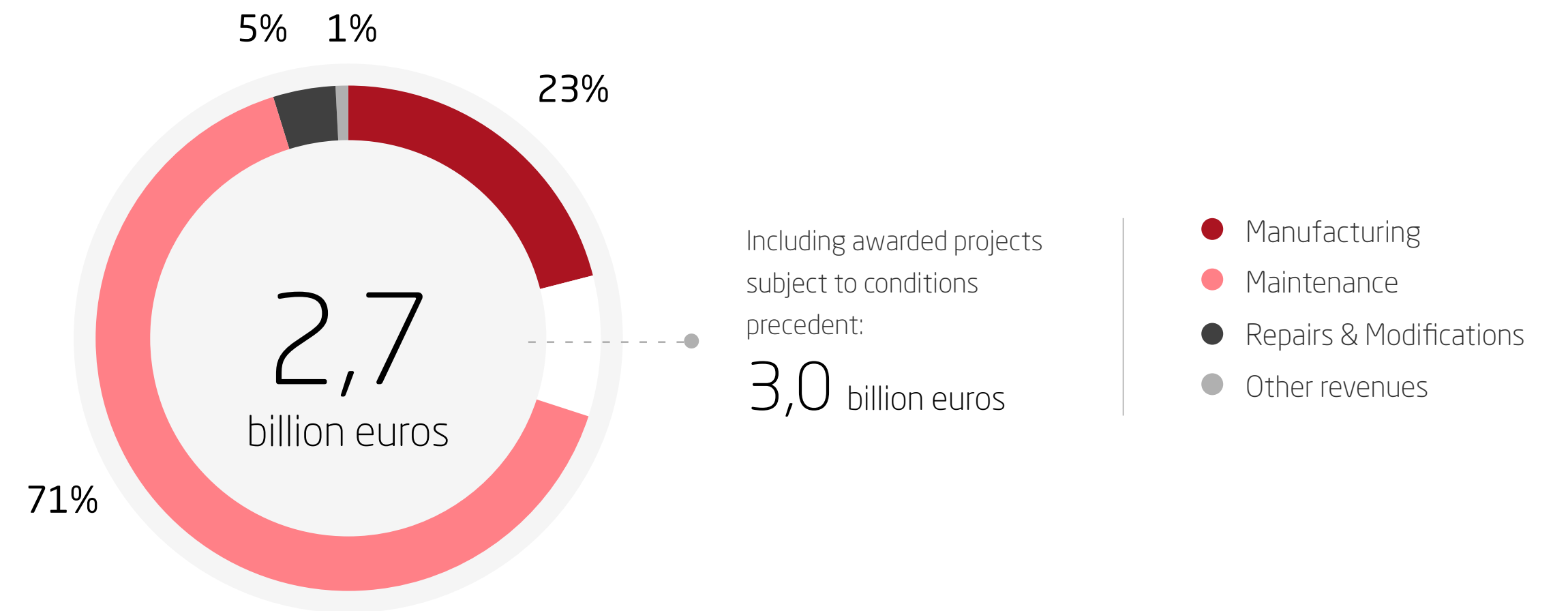
Composition of order book

The order book stood at 2.7 billion euros in 2022, reaching 3 billion euros if we include already awarded contracts subject to conditions precedent.

No significant new project contracting was recorded in 2022. However, the outlook for the sector is positive, driven by the process of decarbonisation of transport in the coming years and reflected in the expectations of the latest industry surveys.

Still, the current order book offers potential improvements in the company's two main business lines. Europe, the Middle East and North Africa are the main potential markets for Talgo with additional tenders worth over 5.0 billion euros, mainly in MAV and long distance; 2.0 billion euros in extensions in projects in Germany, Denmark and Saudi Arabia; and an increase in maintenance services activity with the incorporation of new fleets in production over the last few years.

Positive business outlook for 2023 due to decarbonisation of transport in the coming years.



Millions of euros	2022	2021	Variación
Total order book	2,748	3,249	-15.4%
Order book size: manufacturing	639	976	-34.5%
Order book volume: maintenance services	1,962	2,241	-12.4%
Order book volume: equipment and other	147	32	359.4%

2.3.1 Manufacturing

Industrial area

63,000 m²

Production capacity:

400-500 pcs/year

Centres:

Las Matas, Madrid (Spain)

Manufacture of high speed train (HS) powerheads and maintenance equipment.

Rivabellosa, Álava (Spain)

Manufacture of passenger coaches.

Milwaukee, United States (*)

Assembly and heavy maintenance projects.

Manufacturing accounted for 61% of Talgo's revenues in 2022, calculated on a backbone average, representing 23% of the order book worth 0.6 billion euros.

The main generators of manufacturing revenues were the projects for DB Talgo 230 (Germany), Renfe MAV powerheads (Spain) and DSB Talgo 230 passenger coach compositions (Denmark).

Although it was a year in which the pace of project implementation slowed down compared to 2021, mainly due to supply chain disruptions. Manufacturing revenue, as a proportion of total Group revenues, remain high due to the impact of Covid-19 on the maintenance business during 2020-2022.

The manufacturing order book is mainly composed of international projects (Germany, Denmark and Egypt) which are scheduled to be executed in the next 24-36 months.

2023 targets

- Increase in production capacity at the Rivabellosa factory:
 - Improvement of the wheelset welding process.
 - Improvements to the mobility of materials in the factory (overhead cranes).
 - Improvement of the painting process (priming).
- Continuation of previous ongoing projects.



(*) Provided by public bodies.

2.3.1 Manufacturing

Status of manufacturing projects

HIGH SPEED

Renfe Avril MAV (Spain)

Scope - €900 million

Status

- | | |
|--|---|
| <ul style="list-style-type: none"> • Manufacture of 30 MAV "Avril" trains • Maintenance for a period of 30 years 1 | <ul style="list-style-type: none"> • In dynamic testing. • Significant test milestones recently achieved that ensure deliveries will commence in 2023. • Significant charges are expected as trains are delivered. • Delays caused by COVID-19 and supply chain have been communicated to the customer. |
|--|---|

Renfe MAV locomotives (Spain)

Scope - 161 million

Status

- | | |
|--|---|
| <ul style="list-style-type: none"> • Manufacture of 23 locomotives and maintenance services for 13 trains. • Option for 12 additional locomotives. | <ul style="list-style-type: none"> • In progress |
|--|---|

LONG DISTANCE/PASSENGER COACHES

DB Talgo 230 km/h (Germany)

Scope - €550 million (€2.3 B)⁽¹⁾

Status

- | | |
|---|---|
| <ul style="list-style-type: none"> • Framework agreement for the manufacture of up to 100 Talgo 230 trains. • Initial order for the production of 23 trains. • Second order under negotiation. • Scope for maintenance under negotiation. | <ul style="list-style-type: none"> • In production phase. • AAD⁽²⁾ structure during the life of the project. |
|---|---|

DSB Talgo 230 (Denmark)

Scope - €152 million (€500 M)⁽¹⁾

Status

- | | |
|---|--|
| <ul style="list-style-type: none"> • Initial order for the manufacture of eight trains, together with technical assistance and materials. • Second order under negotiation. | <ul style="list-style-type: none"> • In production phase. |
|---|--|

ENR Talgo 160 km/h (Egypt)

Scope - 157 million

Status

- | | |
|--|---|
| <ul style="list-style-type: none"> • Manufacture of 6 trains and their maintenance for a period of 8 years. | <ul style="list-style-type: none"> • In local testing and delivery phases. |
|--|---|

(1) Maximum scope of the framework agreement.

(2) Abstract Acknowledgement of Debt, with access to up to 60% of the total value of the contract, which allows for advance payment of the contract.

2.3.2 Maintenance

The maintenance business remained strong in 2022, thanks in part to a strategy based on the use of pioneering technologies that continue to set the industry benchmark. It represented 71% of the 2022 order book and includes services provided to customers in 6 countries with a total amount of 2.0 billion euros. They provide long-term revenue visibility backed by a consolidated and growing maintenance order book.

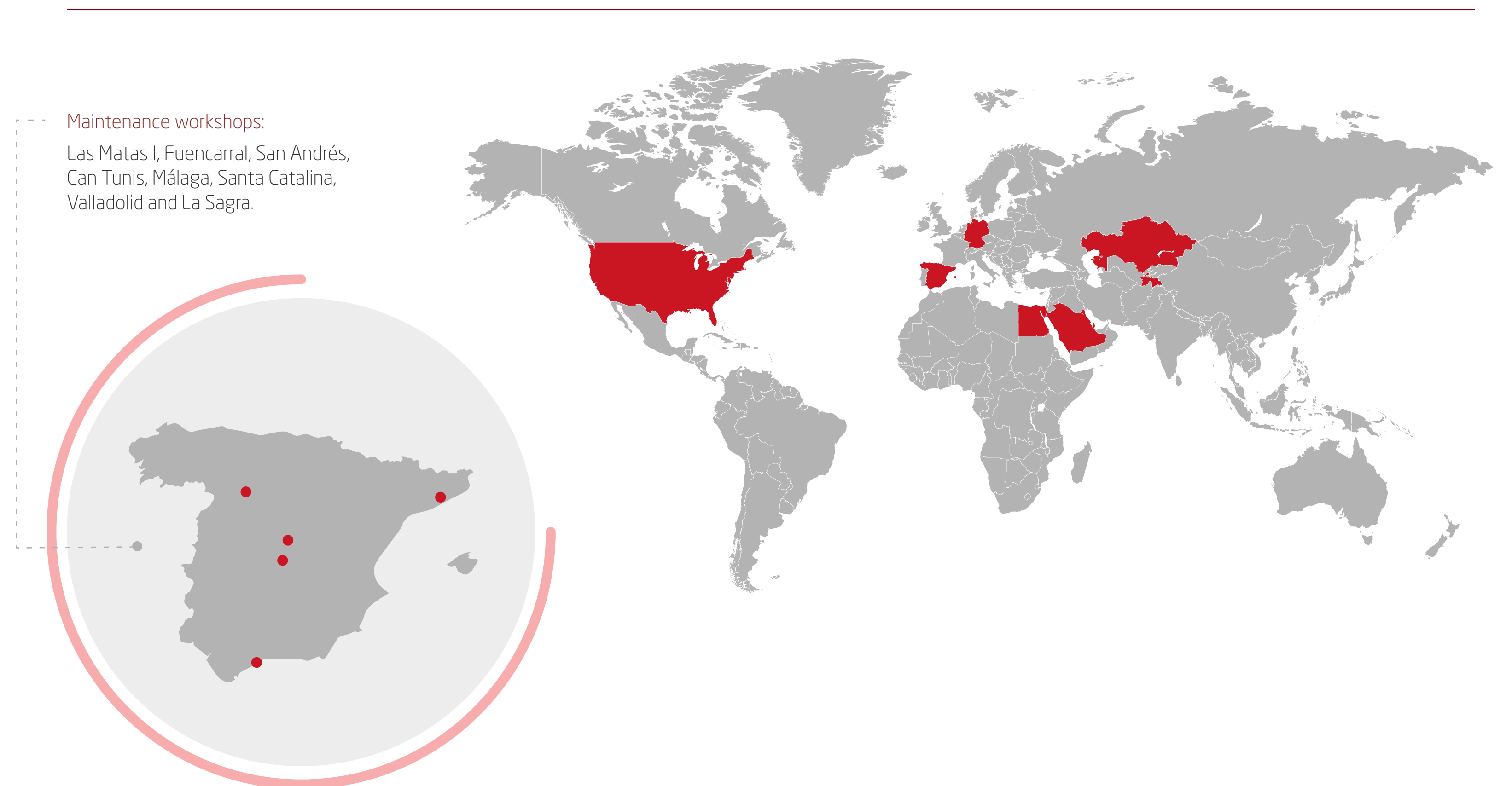
Commercial services have continued to recover during 2022 reaching pre-Covid levels in all markets with one milestone being the launch of new maintenance services (Egypt), where new Talgo trains are being delivered.

The Group maintains a strong maintenance order book characterised by:

- Contracts indexed to inflation and therefore protected against price volatility.
- Recurrent cash flow and low capital requirements.
- A fleet under maintenance that will continue to grow in the coming years.

The maintenance activity in Russia was cancelled in March 2022 and the outstanding contract amount has been removed from the order book. Revenues represented 1% of the Group's total annual revenues in 2021.

Location of maintained fleet



2.3.3 Refurbishment and other

In 2022, the heavy maintenance and refurbishment business accounted for 5% of the total order book with a total order intake of 0.1 billion euros. It is a business that continues to offer growth potential and is the gateway to new markets characterised by customer demand for aspects such as upgrading, remodelling and technical improvement of existing equipment rather than the acquisition of new products.

2023 targets

Immersed in the achievement of a major programme of digitalisation of the entire maintenance process (zero paper) so that we can have a single, consolidated and secure data that provides traceability to all maintenance operations carried out on the trains maintained according to their maintenance plan.

These processes also include the development of predictive activities, based on train-to-ground communications in real time in order to be able to predict any service incidents that may occur. The aim is to improve the availability and reliability of the equipment maintained to enable operators to operate trains more safely.

HEAVY MAINTENANCE AND REFURBISHMENT

Metrolink redevelopment (USA)

Scope - 35 million

Status

- Refurbishment of up to 121 vehicles with an initial order of 50 vehicles.
- In production phase.

Conversion of night trains to MAV (Spain)

Scope - 107 million

Status

- Conversion of Talgo S7 compositions (Talgo "night coaches").
- The initial project includes 156 cars (13 compositions) with an option for an additional 72 cars (6 compositions).
- In production phase.

Remodelling of AV compositions (Spain)

Scope - 35 million

Status

- Activities to refurbish 44 AV train sets.
- New scopes of negotiation.
- In production phase.

LACMTA redevelopment (USA)

Scope - 73 million

Status

- Activities to refurbish 74 coaches of the Red Line.
- Project completed in accordance with the communication received from the client in H1-2022, pending further resolution.
- Currently in litigation with client.



2.4 Talگو's future

The 2022 results show the resilience of the business with satisfactory performance even in adverse conditions, while the 2023 forecasts point to expected growth in activity and therefore in revenues with a recovery in margins. The Group maintains a favourable commercial position, especially in the long-distance and high-speed segments in European countries and in the Middle East and North Africa, where Talگو has already demonstrated the benefits of its technology for the operator and the visible trend for the coming years is very positive.

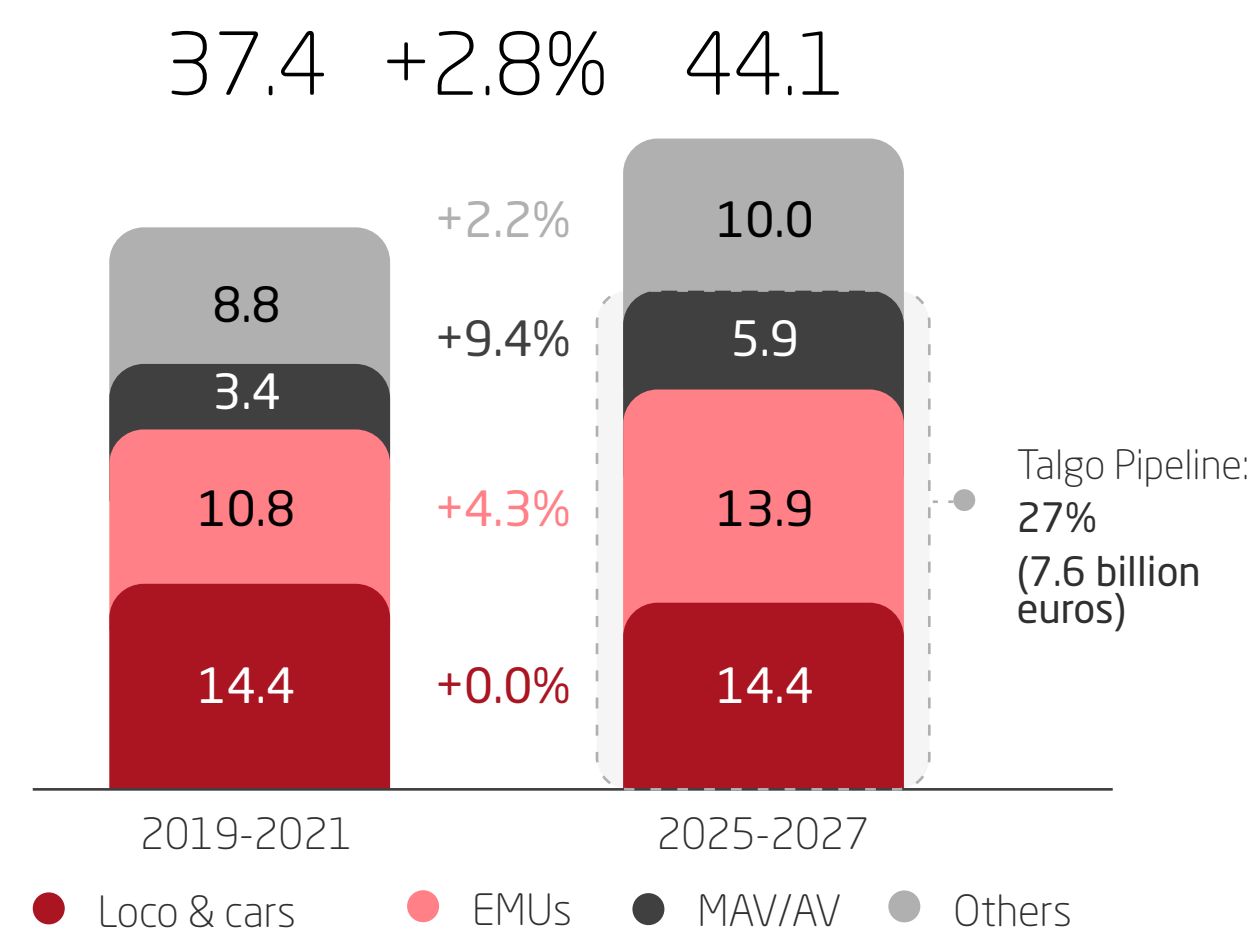
Against this backdrop, Talگو's strategy has the following strengths:

- Proven industrial and commercial operation track record.
- Unique technology with proven customer and end-user benefits.
- Best industry ratios in terms of operational efficiency for commercial operators.
- Framework agreements in place that provide significant growth potential for the coming years.
- Contractual conditions in projects aimed at protecting economic risk (price indexation clauses) and legal risk (in case of penalties or termination of contract).

The rail passenger transport sector is a key element in successfully addressing the decarbonisation objectives and processes of the proposed global transport system for 2030-2035. This, together with the process of liberalisation of the railway map, means that trade prospects are positive for the coming years.

These expectations support Talگو's stated business target for 2023 (2.0x Book-to-Bill).

Rolling stock and Talگو Pipeline market



Source: UNIFE

	2022 Results	2023 targets
Business performance	<ul style="list-style-type: none"> • Execution of order book: Target: 32% Result: 32% • Ratio Book to Bill: Target: 1.0x Result: 0.1x 	<ul style="list-style-type: none"> • 40% order book execution for 2023-2024. ⁽²⁾ • Average book-to-bill c. 2.0x.
Profitability	<ul style="list-style-type: none"> • Adjusted EBITDA: Target: 11% Result: 11% 	<ul style="list-style-type: none"> • Adjusted EBITDA increase to c.12%.
Capital structure	<ul style="list-style-type: none"> • NOF: Target: Cash consumption Result: +51 mill. €. • Net debt: Target: c. 2.5x Adjusted EBITDA. Result: 1.9x • Capex in 2022: Target: 25 mill. € Result: 21 mill. € 	<ul style="list-style-type: none"> • Maintain stable NOF in 2023 with a financial leverage level of c. 2.0x Adjusted EBITDA. • Capex of 30 million €. ⁽¹⁾
Shareholder remuneration	<ul style="list-style-type: none"> • Shareholder Remuneration Programme Target: €10 million Result: €12 million 	<ul style="list-style-type: none"> • 12 mill. €⁽³⁾ in shareholder remuneration in 2023.

(1) Does not include R&D projects.

(2) On the order book for the year 2022.

(3) Subject to approval by the AGM. Preliminarily, it will be implemented through a Scrip Dividend and a share buy-back programme.

2.4 Talگو's future

Results achieved: indicators

The main metrics for the assessment and results of quality management are:

Data and indicators	2022	2021	Change
Quality management: strategies and system deployment			
Cumulative achievement of annual targets of the three-year plan	54%	40%	35%
Fulfilment of annual quality objectives	100%	96%	4.2%
Costs of the quality function (thousands €)	4,943	4,491	10.1%
Expenditure and investments (thousands €)	601	1,241	-51.6%
Scope of quality management system (%)	100%	100%	0%
Rate of implemented corrective and preventive actions	80%	76%	5.3%
Process management			
Process management system scope (no activity)	100%	100%	0%
Process improvement projects: completed	44%	53%	-17%

Quality

Quality management at Talگو mainly covers process management, improvement management, product quality management and quality management itself, which includes certifications, complaints management and internal failure management.

During the year, key activity and development began with the expansion of the quality and certification function within the project structure, from the tender phase to the final acceptance by the customer, as activators and guarantors of the good practice to be carried out.

This was implemented through the ambitious "Become Lean Project", which aims at a holistic review of the company's core processes, as well as their simplification and dissemination. Different actions have been implemented in this respect:

- Implementation of the training and dissemination project for the main focal points governing the processes, with a view to simplifying the documentation of the Management System.
- Acquisition of a tool that helps to improve the transparency of processes and their content, as well as a more intuitive search for the information required by the organisation.
- Preparation of the matrix for improving knowledge of the company's main processes and procedures and their application in the different departments/centres.

- Launch of Green Belt training programme, within the Lean Six Sigma methodology, with the aim of training experts in continuous improvement in all areas of the organisation. As a result, improvement projects will be implemented that will contribute to savings and streamlining processes.

Also in 2022, the effectiveness of inspections has been improved by means of tools such as Failure Mode Analysis and Potential Effects (FMEA) of the process and control plans based on critical characteristics; the return of experience or statistical analysis in material reception inspections.

This has led to the implementation of new improvements or innovations such as:

- Conduct of self-assessment audits of the standards of the company's main processes to determine the degree of improvement of the standards in each process and to determine the focus of improvement.
- Revision of the assurance sheets, generating a model and structure that improves the definition of the necessary inspections (both Talگو's and those of our suppliers) for each of the purchasing families.
- Improved management of survey sending.
- Creation of the laboratory for quality control activities in Rivabellosa.

2.4 Talgo's future

Innovation

Talgo, as a leading national and international group of companies in research and development, assigns the highest priority and resources to this essential driver of business value to ensure its continuity and sustained growth over time. It

Despite the decline in results, Talgo invested 18.3% more in R&D projects in 2022 as a factor for future growth.

was not for nothing that a disruptive innovation in the railway sector was the origin of the company 80 years ago.

One of the proofs of the priority given to innovation is the initiative launched by Talgo to stimulate innovation through the Talgo Award for Technological Innovation in its two categories: railway technology and mobility; the 19th edition of the award was held in 2022.

This commitment is also shown by the fact that, despite the results, 18.3% more has been invested in innovation projects over the course of 2022, totalling 16.1 million euros (13.6 million euros in 2021), with R&D expenditure rising to 1.6 million euros, 14.3% more than in 2021. This represents an investment of 3.8% of the company's revenues.

Data and indicators	2022	2021	Change
Innovation			
R&D investments (capex) (M €)	16.1	13.6	18.3%
R&D expenditure (GID.IDI+OT) (M €)	1.6	1.4	14.3%
Investments vs Sales	3.8%	2.7%	40.7%
Nº of innovations with an environmental scope	6	N/A	N/A
Nº of innovations with a social scope	2	N/A	N/A



2.4 Talgo's future

INNOVATION PROJECTS 2022

ENERGY EFFICIENCY AND SUSTAINABILITY

Vittal One Hydrogen train

- Clean hydrogen drive.
- Flexible operation (hydrogen-electric).
- Replacement of fossil fuels (diesel).
- Reduction of CO₂ emissions into the atmosphere.

Light wheelset

- Use of new sustainable materials.
- Weight reduction.
- Less environmental impact.

Metamaterials for interior noise reduction

- Lightweight acoustic insulation.
- Materials with improved qualities.
- Reduction of noise levels.
- Higher level of passenger comfort.

Box/light structure

- Use of new sustainable materials.
- Weight reduction.
- Less environmental impact.

Viscoelastic panels for structural cushioning

- Use of new sustainable materials.
- Higher level of passenger comfort.

Carbon fibre recycling

- Full product life cycle.
- New recycled materials.
- Sustainable consumption of raw materials.

AVAILABILITY AND VERSATILITY

Motorised wheelset

- Motorisation system compatible with Talgo's independent wheel concept and Talgo's wheelset.
- Distributed traction.
- Increased speed.

INTELLIGENT TRAINS

Box hoist/structure

- Train body lifting system allowing variation of carriage access height for different platform heights.
- Improving accessibility at the entrance to the train.
- Integration of Persons with Reduced Mobility (PRM).

Maintenance 5G

- Digitisation of maintenance tasks.
- Remote assistance and technical support via augmented reality devices.
- 5G coverage in maintenance workshops.

PASSENGER EXPERIENCE

Improved acoustic experience

- Indoor noise reduction through state-of-the-art noise cancellation systems.
- Creation of independent acoustic zones through the use of directional loudspeakers.
- Increasing the intelligibility of the messages broadcast over the train's public address system.

Blackout windows

- Improved comfort by allowing adjustment of light through the passenger window.
- Noise and vibration reduction.

Indoor guidance using ultrasonic beacons

- High-precision positioning system inside the train.
- Increasing the autonomy of blind people.
- Improving universal accessibility.

Variable frequency dampers

- Improved comfort by adjusting the damping conditions during train movement.
- Ensuring stability and safety parameters.

2.4 Talgo's future

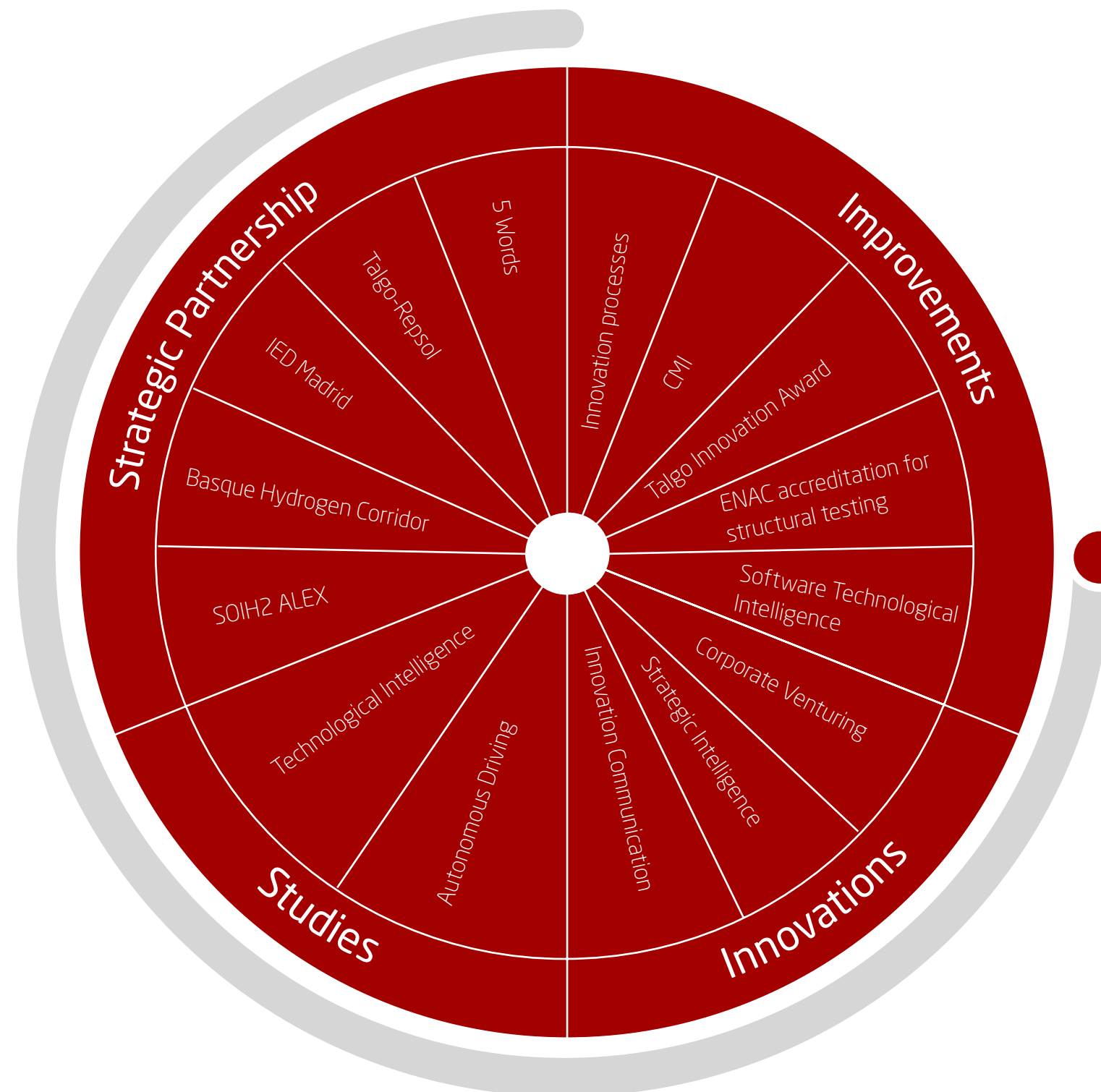
Improvements, innovations, studies and strategic partnerships

The following activities were carried out within the strategic circle of improvements, innovations, studies and strategic partnerships:

- Collaboration with Repsol to promote the creation of renewable hydrogen trains, thus promoting emission-free rail transport on the Iberian Peninsula
- Collaboration with the Basque Hydrogen Corridor, an association whose aim is to create a hydrogen ecosystem based in the Basque Country, that will enable progress to be made in the decarbonisation of the energy, industrial, residential and mobility sectors.
- Collaboration with SOIH2 ALEX, a European public-private economic interest grouping whose aim is the interregional socio-economic, industrial, energy, environmental and technological development of the ALEX territory (Alentejo and Extremadura) through green hydrogen.



Analysis, transparency and strengthening of management



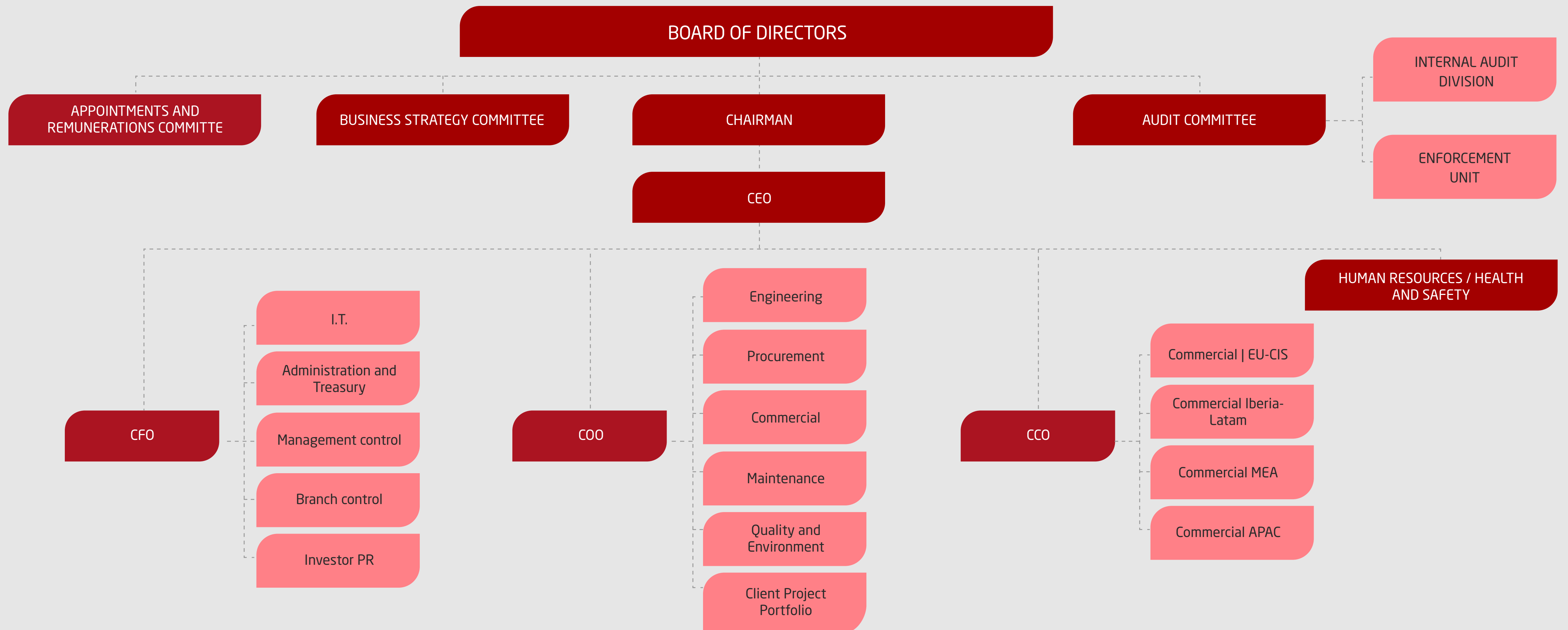
3

Good Governance

- 3.1 Corporate governance structure
- 3.2 Risk management
- 3.3 Ethics and compliance



3.1 Corporate governance structure



3.1 Corporate governance structure

General Shareholders Meeting

In accordance with the Articles of Association, it is the sovereign body of the company and has the power to decide on all matters vested in it by law or the Articles of Association.

The Ordinary General Meeting of Shareholders was held in person and by electronic means on 29 March 2022 on first call, in accordance with the regulations in force at the time of the meeting and was attended by 279 shareholders owning 95,135,654 shares, accounting for 77.069% of the share capital. The final quorum of attendance exceeded 50% of the subscribed voting share capital required by article 193 of the Spanish Limited Liability Company Law, to which article 18 of the Articles of Association refers for the valid constitution of the General Meeting on first call.

The **results of the votes and the agreements approved in 2022** can be found on **Talgo's Investor Portal**, in the Investor Information section.

Board of Directors

It performs its duties with unity of purpose and independence of judgement, affording the same treatment to all shareholders who find themselves in the same position. It should also be guided by the corporate interest, understood as the achievement of a profitable and sustainable business over the long-term in a way that fosters

continuity, sustainable development and the maximisation of the Company's economic value. Throughout 2022, the Board of Directors of Talgo met a total of 11 times with a percentage of attendance in person of the total votes during the year of 93.4%.

In order to comply with best corporate governance practices, the number of members of the Board of Directors was reduced from 15 to 10 during the financial year 2022. They are re-elected every four years, coinciding with the term established by company regulations.

The Board periodically evaluates its functioning and that of its committees, with the support of an external consultant of repute. As a result of the evaluation exercise carried out in 2021, the Board

Talgo reduced the size of the Board of Directors from 15 to 10 members to adapt to best governance practices in 2022.

agreed to continue along the same lines in defining the strategy: to increase the focus on corporate sustainability, to pay attention to business opportunities and to further improve the risk control system and its implementation.

Members of the Board of Directors

MR CARLOS DE PALACIO

Executive Chairman

MR GONZALO URQUIJO FERNÁNDEZ DE ARAOZ

Chief Executive Officer

MR JOSE MARÍA ORIOL FABRA

Non-Executive Vice-Chairman

MR FRANCISCO JAVIER BAÑÓN TREVIÑO

(Proprietary)

MR EMILIO NOVELA BERLÍN

Independent Director Coordinator

MR ANTONIO OPORTO DEL OLMO

(Independent)

MS MARISA PONCELA

(Independent)

MR JACK POPE

(Independent)

NUEVA COMPAÑÍA DE INVERSIONES, S.A.

Represented by Mr Pedro del Corro García-Lomas (Proprietary)

PEGASO RAIL INTERNATIONAL, S.C.A.

Represented by Mr Javier Olascoaga (Proprietary)

MS MARÍA JOSÉ ZUECO PEÑA

(Non-Director Secretary)

MR MARIO ÁLVAREZ GARCÍA

(Non-Director Vice-Secretary)

3.1 Corporate governance structure

The Regulations of the Board of Directors regulate the duties and obligations of directors, especially with regard to situations of conflict of interest, which must be disclosed at any time they may be of interest to the company.

Talgo's Board of Directors currently has three Committees and their respective functions:

- **Audit Committee**, an internal informational and consultative body that oversees the proper functioning of the information and internal control systems, comprising Mr Emilio Novela Berlín as Chairman and Ms Marisa Poncela García and Pegaso Rail Internacional SCA (Mr Javier Olascoaga) as members. In 2022 it met 5 times.
- **Appointments and Remuneration Committee**, an internal body with powers of evaluation and control of corporate governance, with Mr Antonio Oporto del Olmo as Chairman and Mr Jack Pope and Mr Javier Bañón Treviño as members. In 2022 it met 2 times.
- **Strategy and Sustainability Committee**, an internal body with powers to provide technical support to the Board of Directors in relation to the organisation and strategic coordination of Talgo, with Mr Antonio Oporto del Olmo as Chairman and Mr José María Oriol Fabra, Pegaso Rail Internacional SCA (Mr Javier Olascoaga), Ms Marisa Poncela García and Mr Gonzalo Urquijo Fernández de Aroz as members. In 2022 it met 2 times.

Board remuneration policy

Talgo has an attractive and competitive Remuneration Policy for its directors. It is designed by the Appointments and Remuneration Committee according to criteria of transparency, clarity and simplicity that make it easy to understand. The Remuneration Policy consists of a fixed remuneration for independent directors. Executive directors do not receive any remuneration in their capacity as directors, and the remuneration received for their scope as executives consists of fixed remuneration, salary supplements and variable remuneration determined on the basis of financial and non-financial objectives, as well as personal objectives.

Total remuneration to the Board of Directors in 2022 was 2,498 million euros. The average remuneration earned by female members of senior management during the financial year 2022 amounted to 160 thousand euros, while the average remuneration earned by male members of senior management amounted to 190 thousand euros.

The remuneration of directors is extensively detailed in note 20 of the consolidated annual report of Talgo S.A. and subsidiaries and with greater detail in the **2022 Annual Report on Directors' Remuneration** of Talgo S.A. and the information broken down by age and gender of directors is included in the **Annual Corporate Governance Report (ACGR)**, both available on the Talgo Investors' portal and the CNMV (Spanish National Securities Market Commission).

2022 Remuneration - Executive directors (thousands of €)

Fixed remuneration	929
Variable remuneration	0
Net profit from shares or vested financial instruments	800
Remuneration from savings schemes	17
Other items	103
Total executive directors	1,849

2022 Remuneration - Non-Executive directors (thousands of €)

Fixed remuneration	530
Remuneration for seats on committees	119
Total external directors	649

3.2 Risk management

Talgo has implemented a risk management model, approved and monitored by the Audit Committee, and ultimately led and governed by the Board of Directors, which applies to all subsidiaries and permanent establishments in all countries where it operates. The driving force behind Talgo's risk management is the current risk management policy, along with its principles and guidelines, which has been in force since 2020.

Coinciding with the reassessment of critical risks 2020, such risks are systematically studied in the company at the beginning of each year, the model is reviewed and improvements are introduced to maintain a updated and consolidated system over time, where the consolidation of a culture of risk prevention and mitigation and internal control is a crucial aspect of its successful operations.

Talgo's organisational model is based on the lines of defence model, which covers responsibilities from the business to the governing bodies, according to the following scheme:

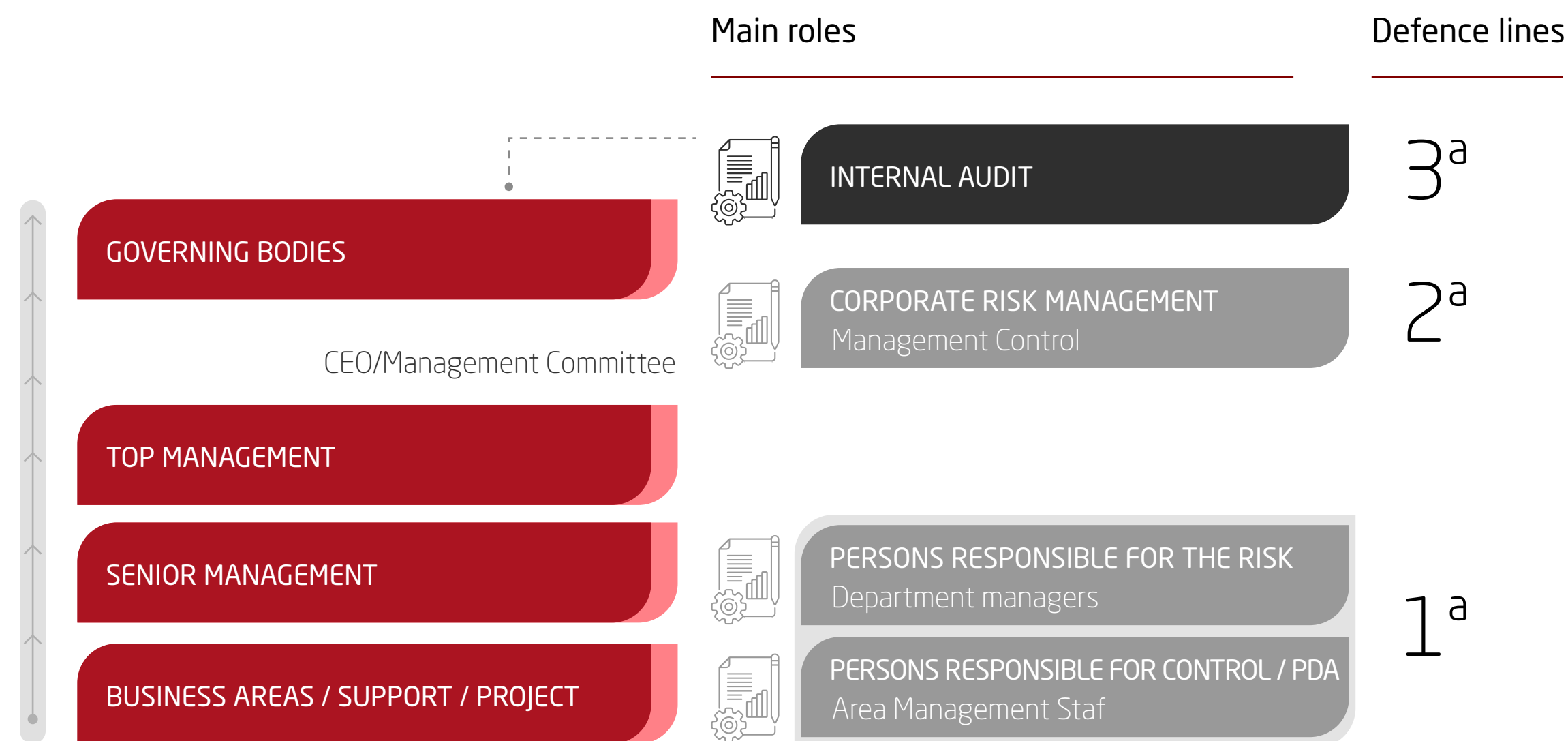


Table of risks

Talgo has defined a risk framework that identifies the main risks related to the environment and regulatory, financial, financial reporting, fraud and compliance and industrial risks. Both the particular risks indicated in each section and the control measures applied can be consulted in the **2022 Corporate Governance Report** published on the Talgo website (pages 42-44).



3.2 Risk management

Risk management in 2022

In 2022, the main risk management actions were the following:

- Updating the Risk Map for 2022, prioritising Talگو's critical risks.
- Quarterly internal monitoring with all risk owners, of controls and action plans and KRIs, with definition of new indicators, measurement systems and adjustment of tolerance levels of the aforementioned indicators.
- Fostering a risk management culture in the different areas of the company and standardising the joint assessment process.
- Explicitly distinguish non-financial risks relating to corporate sustainability in a new risk category.

The reliability of the financial information is ensured through the internal control over financial reporting system (ICFR) and, in accordance with the established relationship frameworks, the following stakeholder requirements have been met:

- **Shareholders and investors:** More information regarding risk and remuneration that may affect their investments.
- **Credit institutions:** Information for financing negotiations Growing demand for inputs that help them assess the outlook for the company's business in the medium and long term.
- **Clients:** Information on the company's risks in pre-bidding processes.

Likewise, Talگو's website in 2022 has been used to provide due transparency on risk management through the publication of the Talگو 2021 sustainability and responsibility report.




Digitalisation and cybersecurity

At Talگو, digitalisation focuses on efficiency, cost reduction, improved engagement with customers and stakeholders, competitiveness and improved capacity to face the future, new product and service functionalities and corporate sustainability. At the same time, it presents a challenge and a risk to the cyber security of enterprise systems, as a vehicle for dealing with growing and increasingly dangerous cyber attacks and for ensuring information privacy and the eradication of intellectual capital leakage.

Both concepts come together in the global Digital Transformation project (Digital GO) with which, over the last 5 years, the Talگو Group has accelerated the digitalisation and adaptation towards Industry 4.0, both in the field of manufacturing and maintenance.

For its part, the Strategic Cybersecurity Plan, whose processes are certified under the ISO27001 standard and which participates in other standards and norms such as IRIS or ISO31000, has focused in 2022 on evolving towards industrial cybersecurity standards, as well as reinforcing protection and supervision measures in order to be prepared for future threats and new generation cyberattacks. This has earned it recognition from the CISOVERSO community of cybersecurity experts with the "CISOVerso 2022" award for outstanding implementation of a cybersecurity programme.

Cybersecurity

	2022	2021	Change
 Contained security incidents (<72 hours)	100%	96%	4.2%
 Email frauds dealt with	893	857	4.2%
 Economic losses: cybersecurity incidents	0	0	0%



3.3 Ethics and compliance

Ethics is one of the key pillars of the professional performance model of Talgo's staff, and is conceptualised as sustainable, ethical and responsible management (SER).

Key activities in 2022

Talgo's strong and growing international presence has led to the transformation of its compliance programme to align with international best practices, with the establishment of a common process of assessment, monitoring and control of compliance risks under the principle of "zero tolerance towards the commission of criminal acts" and, in particular, against any form of corruption. This is embodied in the Group's anti-fraud and anti-corruption policy.

The mission of the compliance programme is to contribute to Talgo's sustainability and good reputation by promoting compliance with all applicable laws and the Code of Ethics, based on an effective risk management system.

The Code of Ethics encourages anyone to report any non-compliance with legislation or internal policies.

The company promotes the use of the Ethics Channel, a confidential system that can be accessed via the company's intranet or website (www.talgo.com) and which it has outsourced through the company "i2Ethics" to provide it with the greatest independence in management.

The compliance unit is in charge of the forensic investigation process and the drafting of the proposal for action on the basis of the Code of Ethics complaints received through the ethics mailbox. Of particular significance in this area are the anti-fraud and anti-corruption policies and the harassment protocol.

ETHICS	2022	2021	Change
Nº of complaints pursuant to Code of Ethics	3	6	-50%
Nº of complaints pursuant to Code of Ethics analysed and in progress	0	0	N/A
Nº of complaints resolved	3	6	-50%
Nº of complaints pursuant to Code of Ethics with corrective actions	0	0	N/A
Nº of people with awareness raising and training in values, code of ethics and target behaviour	383	459	-16.5%

COMPLIANCE	2022	2021	Change
Meetings of the Compliance Committee	5	6	-16.7%
Internal compliance initiatives (including S&R, etc.)	15	15	0
External compliance initiatives	4	4	0
Compliance-related training	5	5	0
No. of people trained (crime prevention)	300	254	18.1%
Contributions made to political parties and/or representatives (financial or in kind: in thousands €)	0	0	N/A



3.3 Ethics and compliance

Transparency and communication

Talگو has a transparency and communication strategy that is carried out through its own media (corporate websites and social media), and in collaboration with specialised agencies with local, national and international reach to generate the greatest possible impact, depending on each territory.

During the 2022 financial year, the strategy was updated with the objective of a systematic implementation of planning in operational decision-making with an impact on communication and transparency. In this field, Talگو employees were informed of the rules and recommendations regarding personal actions relevant to external communication, in line with the current Communication Policy.

The most significant communication activities were as follows:

- Coverage of the biennial international trade fair Innotrans (2022 Edition), the largest in the sector and the only one of its kind in the world, with a larger presence than in previous editions.
- Joint campaign with customer Deutsche BA to provide open and transparent coverage of the ICE L train manufacturing process.
- Joint campaign with client Renfe Operadora to cover the presentation of the works for the reform and implementation of connectivity systems in 130/730 series trains.
- Dissemination of the milestone Commercial Commissioning of the project for the construction, commissioning and maintenance of day trains in Egypt.
- Campaign in the Spanish market to communicate the most significant technical milestones in the complex process of technical approval of the Renfe 106 Series trains.
- Own media campaign to publicise the 80th Anniversary of Talگو 1942-2022.
- Own media campaign to publicise the technical milestone First Autonomous Movement of a Hydrogen train with batteries in Spain, Talگو's TPH2 train.
- Joint announcement with Petronor of the signing of an agreement with the Provincial Council of Alava for the creation of a centre for the research, development and manufacture of trains powered by hydrogen fuel cells
- Joint communication of the creation of the Shyne consortium, a Spanish multi-sectoral consortium to promote renewable hydrogen.
- Joint announcement with the European Investment Bank on the Green Loan Signing milestone
- Publicity campaign in the Basque Country to promote awareness of the implementation of Talگو in Rivabellosa (Álava) and its influence as a driver of employment and industry in the hinterland of the Arasur-Miranda de Ebro areas.
- Joint celebration and dissemination of the Talگو Awards for Technological Innovation (XIX edition) and the Talگو Award for Professional Excellence for Women in Engineering (III edition).
- Organisation and dissemination of open house type visits to various institutional bodies and citizens, to provide a direct, on-site look at the manufacturing activities at the Las Matas II facilities.

- Dissemination of Talگو's participation in the Diversity Charter initiative, which promotes inclusion in companies and institutions.
- Collaboration in the dissemination of the Talگو Foundation's activities.
- Promotion of collaboration with the foundation, Fundación de los Ferrocarriles Españoles.
- Active collaboration with various organisations dedicated to promoting knowledge of the railway (Friends of the Railway).

	2022	2021	Variación
N° of Facebook followers	2,041	1,458	40%
N° of Twitter followers	4,910	3,960	24%
N° of LinkedIn followers	125,930	111,829	12.6%
N° of YouTube followers	6,750	6,260	7.8%

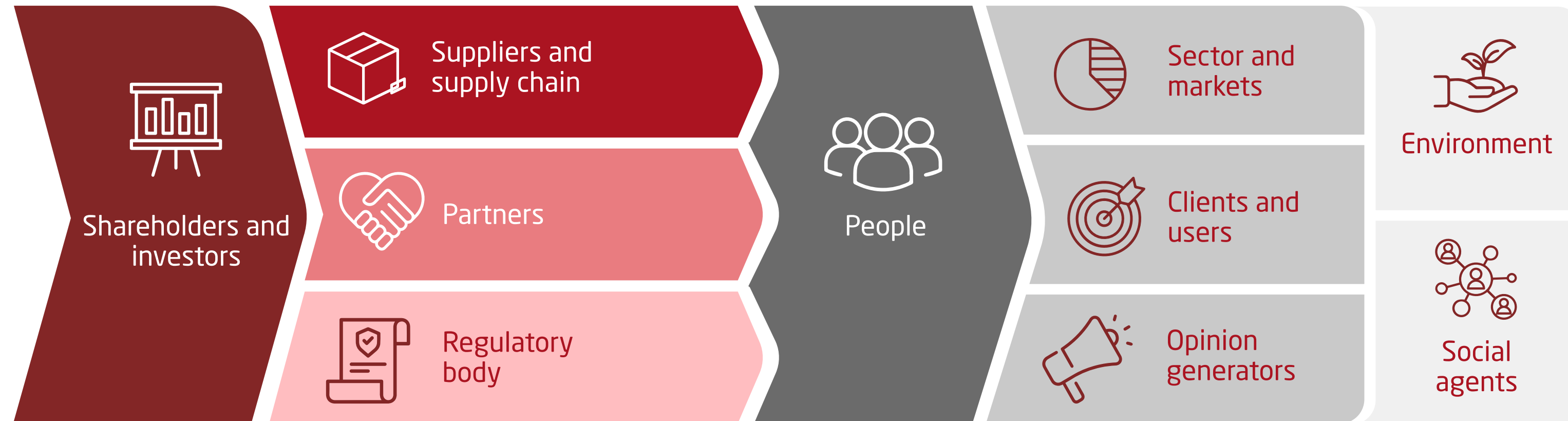
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Business sustainability and responsibility

- **4.1** Clients
- **4.2** Accionistas e inversores
- **4.3** Empleados
- **4.4** Medioambiente
- **4.5** Proveedores
- **4.6** Sociedad



Stakeholder map



Talgo is developing a new materiality management model through the strategic project PEP01041 for the identification of relevant issues (material issues) of the business and their subsequent materiality analysis. Its development has been structured in two phases and will be completed in 2023, taking into account dual materiality analysis factors (GRI, SASB, AccountAbility, IIRC, EFRAG), which implies taking into account both risks and opportunities from financial and non-financial perspectives.

The identification phase was completed in 2022 by using six types of analysis (internal and external): management, stakeholders, trends and innovations, prescribers (especially GRI 2), benchmarking (competitive and functional) and sustainability experts. In this analysis, 59 possible material themes were identified, grouped into six categories, of which 24 themes have been selected internally.

Corporate governance and business defence

- 01 Responsible corporate governance.
- 02 Sustainable business and financial strength.
- 03 Risks and materiality.
- 04 Ethical conduct and compliance.

Sustainable and responsible management

- 05 Human rights: due diligence.
- 06 Dialogue and transparency with stakeholders.
- 07 Contribution to S&R initiatives (SDGs and Global Compact).

Value chain

- 08 Responsible sales and customer management.
- 09 Responsible procurement and supply chain management.
- 10 Sustainable and responsible projects.
- 11 High quality, sustainable, safe and differentiated products and services.
- 12 Responsible manufacturing and circular economy.
- 13 Quality, innovation and knowledge.
- 14 Cybersecurity and confidentiality.
- 15 Technology, digitalisation and strategic intelligence.

People

- 16 Safety, health and welfare.
- 17 Human capital, talent and diversity.
- 18 Culture and job satisfaction.

Environmental footprint and contribution to the environment

- 19 Climate change.
- 20 Environmental impact.
- 21 Contribution to the environment.

Social footprint and contribution to society

- 22 Participation and contribution to peoples and communities.
- 23 Social action and development.

Communication and transparency

- 24 Responsible communication and transparency.

4.1 Customers

Talgo has a commercial and customer management policy and a fair competition policy, together with an extensive network of sales representatives around the world, particularly in the areas of greatest railway activity such as India, North Africa, the Persian Gulf, Latin America and EU countries, with the aim of helping identify sales opportunities, providing advice on local regulations, support in the preparation of administrative and technical aspects of the offers that involve requirements that are consolidated under the ISO 9001, ISO 14001, IRIS, ISO 21500 and EPD standards to guarantee their quality.

Progress in 2022

In 2022, Talgo continued to consolidate markets and collaborate with existing customers. For example, it won a contract in Egypt for the purchase of seven night trains and their maintenance or the expansion of RENFE and Uzbekistan's fleet services projects.

In the past year, it continued the processing of introducing Most Economically Advantageous Tender (MEAT) requirements in customer valuation matrices is becoming more and more common. It will likely be transposed into European legislation in the coming years. These criteria prioritise non-economic aspects in tendering processes and better value for money, with special emphasis on sustainability aspects (energy consumption, CO2 emissions in the value chain from the procurement of materials to the end of life of rolling stock, etc.) and eco-design (recyclability and recoverability of products and services, lower obsolescence and extension of useful life periods).



Nº of customers in the year		Nº of new customers in the year	
17	17	1	0
2022	2021	2022	2021

4.1 Customers

Claims and complaints

In 2022, six complaints were received through the formal channel managed by the quality department. All complaints received are analysed, answered and, where appropriate, corrective action is taken to mitigate and prevent recurrence.

Talgo has a systematic process for measuring and controlling the quality of solutions and the degree of customer satisfaction, which also takes into account the measurement of the passenger experience, something that has a very important influence on loyalty and prescription on the part of customer operators. The evaluation process takes place between December and February.



Complaints and claims (C&C)	2022	2021	Change
Total customer complaints and claims	6	7	-14.3%
C&C: bidding process (trains)	0	1	-100%
C&C: project management and delivery (trains)	3	2	50%
C&C: maintenance services (trains)	2	3	-33.3%
C&C: equipment for maintenance	1	1	0%

Customer satisfaction (out of 5)	2022	2021	Change
Satisfaction with Talgo reputational value (global level)	3.7	4.0	-7.5%
Satisfaction with bidding process (trains)	3.8	3.8	0%
Satisfaction with project management and delivery (trains)	3.9	3.7	5.4%
Satisfaction with maintenance services (trains)	3.9	3.9	0%
Satisfaction with equipment for maintenance	3.9	4.03	-3.2%

For 2023, Talgo has set for itself the strategic goal of integrating sustainability and responsibility commitments (privacy, etc.) into the customer management policy, including commitments required by the future EU corporate sustainability due diligence directive.



4.2 Shareholders and investors

The global economic outlook deteriorated through 2022, causing expected global GDP growth rates to decline repeatedly and raising fears of recession. Geopolitical instability and economic uncertainty, as well as trade tensions between major economies and rising inflation, have triggered the onset of a cycle of balance sheet reduction and interest rate increases by central banks, thus causing high volatility.

Rising labour and material costs put pressure on companies' profits, causing operating earnings per share to decline during the year.

As a result, capital markets were highly volatile, turning in a negative performance in the euro area and a historic performance in the case of the US, generating significant losses in both global equities and bonds, with only certain commodities registering significant gains.

The S&P 500 fell by almost 20% while the Eurostoxx 50 recorded losses of close to 12% for the year. In Spain, the Ibex-35 was down 6%. Talگو's shares were hit hard by market expectations about the impact of inflation and supply chain disruptions on its business, resulting in a 39% price drop for the year.

Thus, the share started the year 2022 with declines until reaching a low of €2.47 in October, before starting a progressive recovery that led it to close the year at €3.30.



4.2 Accionistas e inversores

Talگو's average daily trading volume for the year increased significantly, up +87% to 175,000 shares traded daily.

In addition, the Board of Directors approved to submit to the Annual General Meeting a remuneration programme of 10 million euros, which was approved by the Annual General Meeting and implemented during the year. This programme was implemented through, on the one hand, a Flexible Dividend or Scrip Dividend, which provides the opportunity of receiving the dividend in cash or in shares according to the shareholders' preferences and, in addition, a Share Buyback Programme whose purpose is to eliminate the dilutive effect coming from the issue of new shares which were delivered to 83% of the shareholders who elected to receive the dividend in shares.

The 10 million euro Remuneration Programme presented and approved in 2022 reinforces Talگو's commitment to its shareholders.

Stock data table (as at 31 December 2022)

Talگو share price data as at 31 December 2022

123,442,425

Number of listed shares

124,312,973

Number of shares in 2022

3.36

Price (€)

414.80

Market capitalisation (Millions of euros)

Talگو share price data in 2022

Variación del precio de la acción

-39.2%

Change in share price

258

Number of trading days (days)

5.50

Maximum listed price (€)

2.47

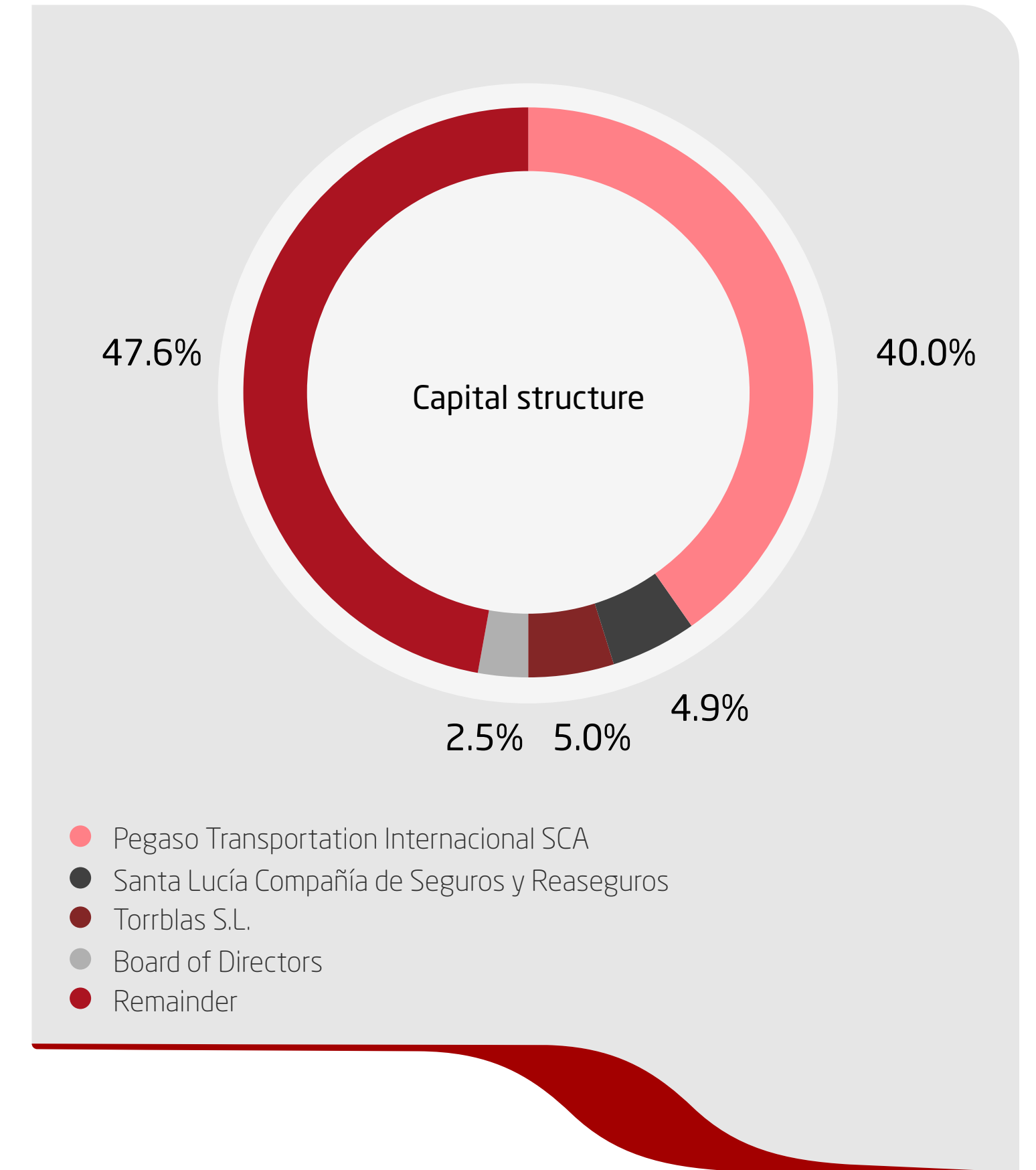
Lowest listed price (€)

3.51

Weighted average share price (€)

174,483

Average daily trading volume (thousands of shares)



4.3 Employees

Employment, organisation, staffing and compensation

The Talgo Group has a high degree of employment stability, as reflected in its permanent hiring rate of 91% in 2022. Talgo's workforce in 2022 averaged 2,733 people (1,865 in Spain and 868 in subsidiaries), an increase of 2.36% compared to 2021. Of these, 88% were on permanent contracts and 12% on temporary contracts and 32 traineeships were taken up. It is worth noting that, in the 745 new hires during the year, a balance was maintained to give opportunities to both those between 16 and 30 years old (306) and professionals over 30 (391), but especially the focus continues to be on attracting more experienced talent and 48 hires over 50 years old were made.

In 2022, the average salary at Talgo Spain for a person in their first year of employment and belonging to the middle management group was €48,394.89, which is 245.68% higher than the minimum wage for Spain in that year (€14,000). For people belonging to the group Technicians, administrative and others, the average salary for the year 2022 who have earned in the year 2022 and who work at Talgo Spain is €27,312.91, which is 95.09% higher than the minimum interprofessional wage in Spain in that year.



	2022	2021	Change
Average number of people in the financial year	2,733	2,670	2.36%
- Men	2,349	2,303	2.00%
- Women	384	367	4.63%
Frequency rate ⁽¹⁾	9.96	8.51	
Severity rate ⁽²⁾	0.22	0.25	

Professional classification	Female	Male	Total
Senior management	2	5	7
Address	8	46	54
Middle management	70	341	411
Technical, administrative and other	304	1,957	2,261

	2022	2021	Change
Average salary per person	42,376.6	37,025.0	14.4%
Average management salary	126,623.3	111,077.3	14.0%
Average salary of middle managers	59,834.4	52,127.0	14.8%
Average salary of administrative and other staff	37,193.3	32,830.9	13.3%

(1) Industrial accidents per million hours worked. Talgo FTEs.

(2) Number of working days per 1,000 hours worked. Talgo FTEs.

4.3 Employees

Diversity, equal treatment and opportunities

Talgo has an equality committee made up of members of management and workers' representatives, which, among other functions, is responsible for promoting the implementation of the equality plan that the group implements and for monitoring and evaluating the degree of compliance with the measures adopted.

Year after year, Talgo works to implement measures that enable greater balance and gender equality in different positions and departments, continuing in 2022 with initiatives that increase the participation of women in positions of responsibility:

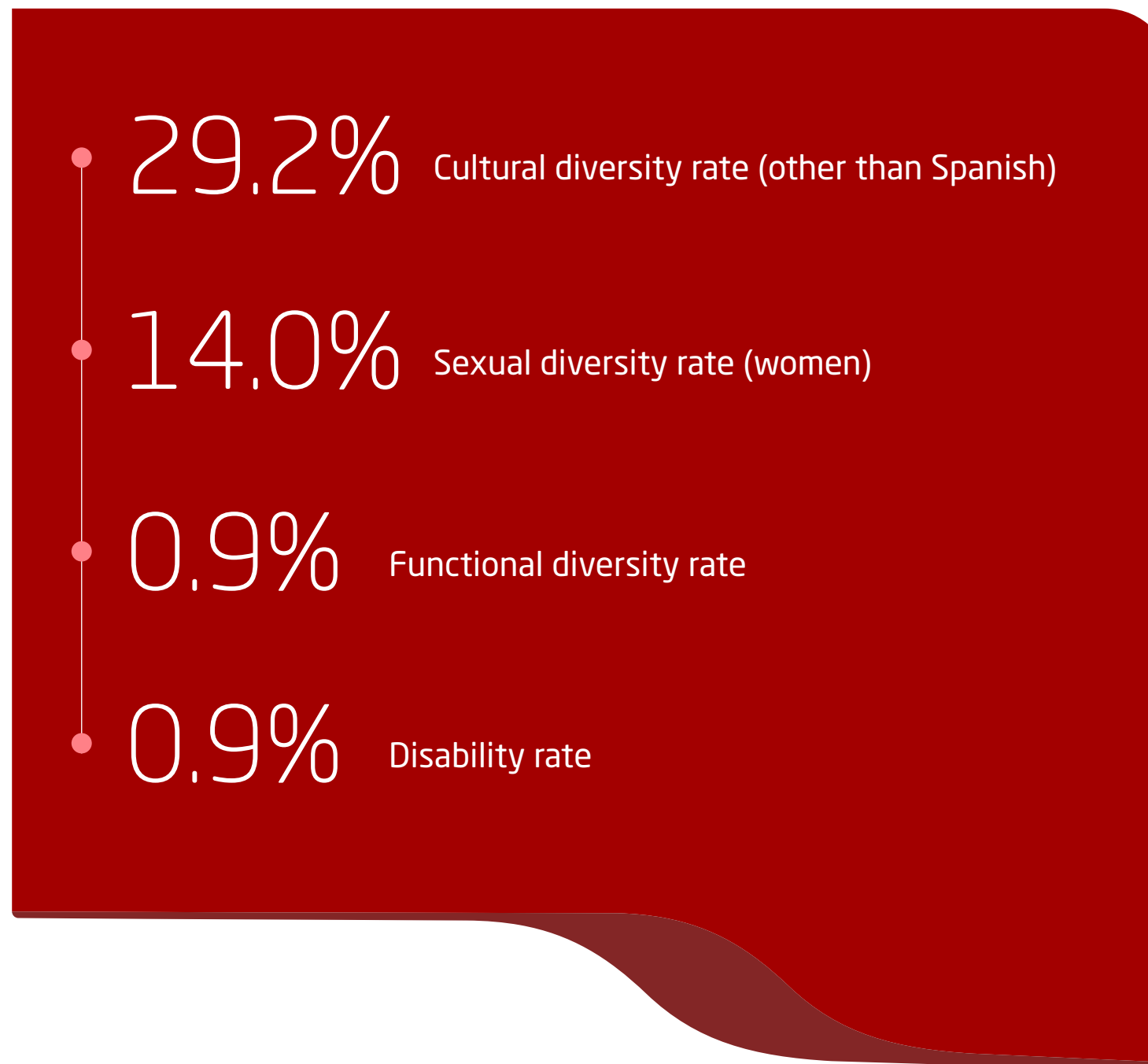
- The "Take the Lead" programme, accompaniment and leadership programme for women.
- Management development programme "Women engineers and managers", in collaboration with the Nebrija University.

In addition, Talgo awards the annual Prize for Professional Excellence for Women in Engineering in Spain. This award promotes the relevance of women in both engineering and industry by recognising their work and dedication.

In Spain, Talgo has ethics committees in each of its work centres, which are responsible for ensuring compliance with the harassment protocol and resolving any interpretation or doubts in its application.

Talgo continues to be a member of the Charter for Diversity, an initiative led by the Diversity Foundation, which demonstrates the company's commitment to the directives promoted by the European Commission on diversity and non-discrimination.

Likewise, this commitment to diversity is evidenced by the renewal of the "CEO for Diversity" alliance that promotes innovation in diversity, equity and inclusion strategies in Spanish companies, an initiative of the Adecco Foundation and the CEOE.



Labour integration of groups at risk of exclusion

At the end of the 2022 financial year, the Talgo Group had 27 employees with a disability of more than 33%, of whom 7 are women and 20 are men. These people are represented in all categories of the workforce.

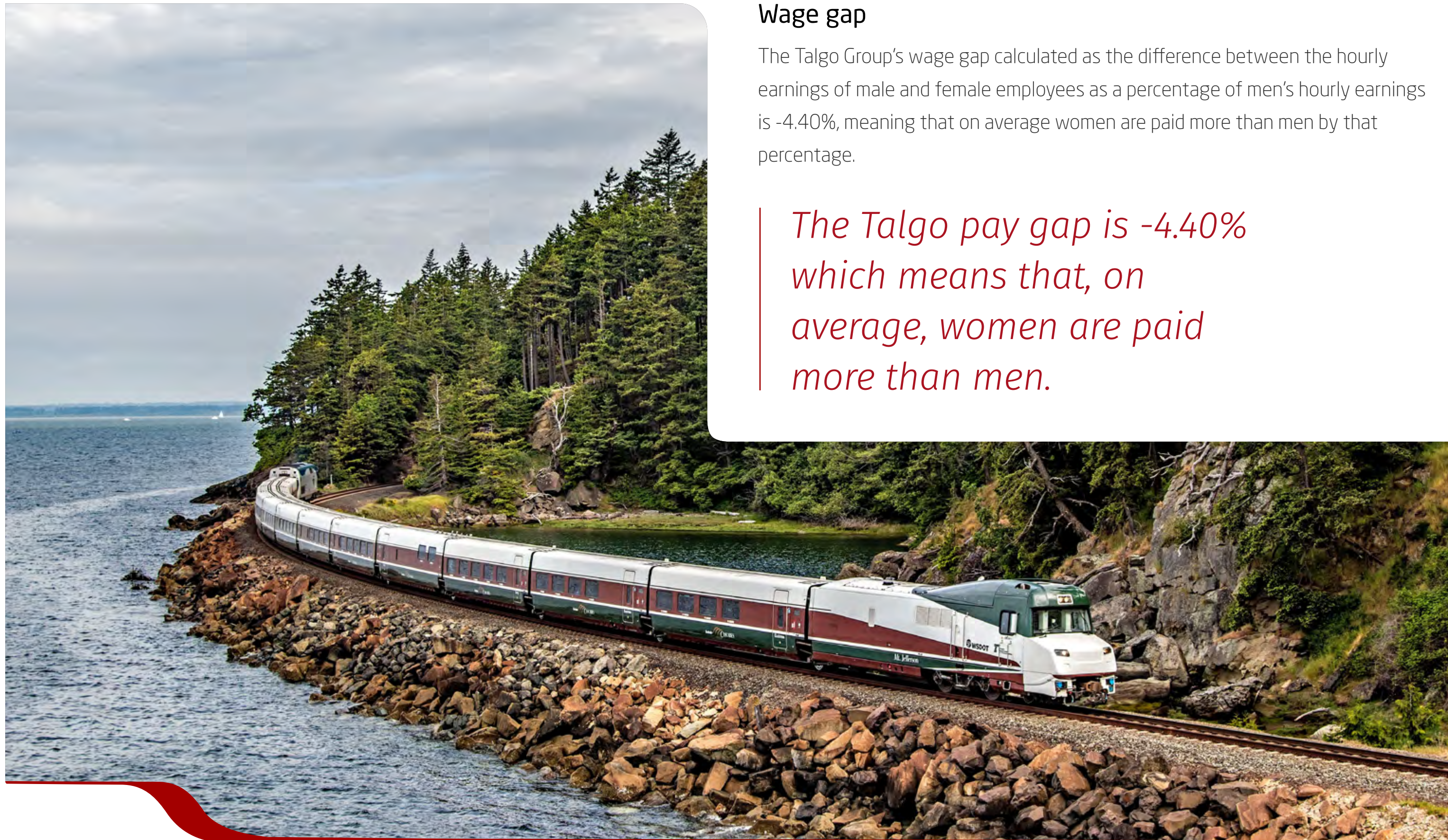
Talgo España, as it does not directly cover the number of disabled employees (2% of people with a disability equal to or greater than 33%), has a certificate of exceptionality from the Ministry of Labour and Social Security that allows it to implement "alternative measures" that contribute to the development of activities for the insertion and reintegration of disabled people into the labour market, thus complying with the established rate.

In addition, also during the past year, Talgo has contributed, through the agreement signed with the Adecco Foundation, to the "Employment for All Project" through which more than 4,000 people have joined the labour market, 3,000 of whom are people with disabilities, and also to the "Mental Health Project" through which more than 800 people have started working.

The Group has carried out training and awareness-raising initiatives during 2022, giving visibility to the International Day of Persons with Disabilities, World Down's Syndrome Day and World Mental Health Day, etc.

Within the framework of the agreement signed with the Adecco Foundation since 2007, Talgo Spain has been developing a programme called "Plan Familia" (Family Plan) to provide advice, guidance and development of skills and abilities for family members of employees up to 65 years of age who have a disability. During 2022, the Family Plan has assisted 21 people with disabilities, family members of Talgo employees. These people have benefited from therapies with psychologists, speech therapists, physiotherapists and other health professionals that have allowed them to improve their skills and, in some cases, enhance their employability.

4.3 Employees



Wage gap

The Talgo Group's wage gap calculated as the difference between the hourly earnings of male and female employees as a percentage of men's hourly earnings is -4.40%, meaning that on average women are paid more than men by that percentage.

The Talgo pay gap is -4.40% which means that, on average, women are paid more than men.

	2022	2021	Change
Executive wage gap	1.5%	6.9%	-78.3%
Middle management pay gap	1.8%	2%	-10%
Technical, administrative and other wage gaps	-4.9%	-8.3%	-41%

Dialogue, communication and attention to people

The organisation respects the right of all employees to organise freely, and allows union members to hold meetings, collect dues and distribute union information outside working hours and without disrupting the business of the company.

The number of Talgo Group employees with full or partial coverage of the collective bargaining agreement or similar collective agreements depending on the country concerned amounted to 2,872 employees as at 31 December 2022.

Talgo has implemented various initiatives that have encouraged the involvement, commitment and enthusiasm of its workforce:

- Integration actions aimed at improving relations between teams: paddle tennis tournament and the celebration of Talgo's 80th anniversary.
- Recognition actions among employees: Talgo Awards in which employees vote for their own colleagues in different categories, in recognition of the promotion of equality, fairness and non-discrimination among employees.
- Actions aimed at promoting corporate volunteering: VolunTalgo Programme

4.3 Employees

- The “Francisco Mellado” programme to raise awareness of technical careers for students in the 4th year of ESO.
- Employee idea competitions for different company projects and initiatives.
- “International Days at Talgo”, aimed at raising awareness, reflection and employee participation through the celebration of different international or world days.
- Employee survey to assess aspects such as communication, thoroughness, transparency, efficiency of communication, etc.
- Consolidation of the “Conversations with the CEO” programme.
- Project to redefine the corporate intranet to improve the flow of internal information.

Turnover

In recent years, Talgo has not carried out any personnel restructuring other than that resulting from the pandemic. For the company, and due to the high technical knowledge of its professionals, it is a priority to comply with an adequate knowledge transfer process that guarantees the retention of this knowledge in the organisation. In 2022, 96 people were involuntarily terminated.

The Group's voluntary turnover rate in 2022 was 11.38%. Broken down by gender, the Group's voluntary turnover rate in 2022 for women was 12.27% and 11.23% for men.

Talent and career development

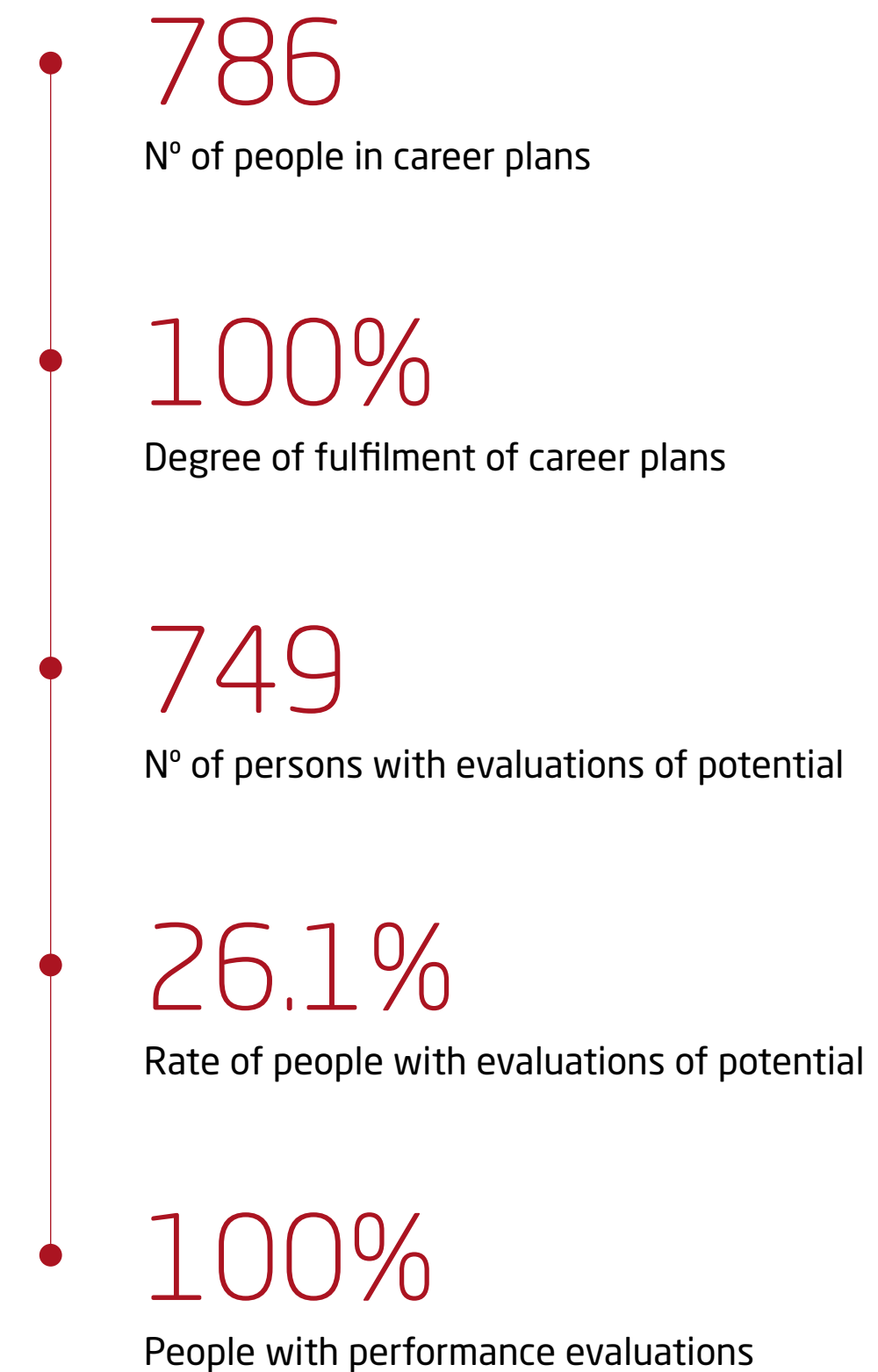
Talgo has a talent attraction system based on best practices in the market which, together with its attractiveness as an employer, make Talgo a good place to develop as a professional.

In 2022, various measures have been implemented with the aim of involving and encouraging employees in the culture, corporate values and making visible the professional development opportunities that make Talgo a great company to work for.

During 2022, 18 internal promotion processes were carried out and 37 people were expatriated. External talent is sourced from referral recruitment sources to ensure the diversity of the people who apply for the different positions. In addition, Talgo believes that its employees are the best brand ambassadors and therefore launches the “bring a friend” initiative, which rewards employees who provide qualified external candidates to join the company.

In addition, Talgo has collaboration agreements with numerous universities, training centres, foundations and associations in order to generate a competitive and quality job offer.

Over the past year, Talgo has redefined and implemented the induction training programme for people joining the manufacturing and maintenance workshops, including technical, health and safety, internal procedures, etc. training.



4.3 Employees

Training

Talgo has a comprehensive annual training plan for the entire organisation that includes actions aimed at developing skills, competencies for project execution, technical, regulatory and occupational risk prevention aspects, ethical and crime prevention aspects, not to mention language training provided through the company's language school.

In 2022, Talgo provided more than 133,000 hours of training, 41.6% more than in 2021.

In the Talgo Group, 131,718 training hours were provided in 2022, with the ratio of training hours per employee being 48.02 hours, an increase of 41.6% and 38.1% respectively compared to 2021. Talgo has continued to ensure staff training through the digitalisation of training content and by transferring face-to-face training to virtual classrooms, using new training methodologies and tools.

In order to achieve a new style of leadership, the Group has worked on the training and development of the company's managers, with the collaboration of prestigious business schools such as Deusto. During the year, 58 people have gone through these programmes and the process will continue in 2023.

	2022	2021	Change
Total number of training hours	131,717.9	93,036.0	41.6%
Nº of training hours per employee (average per year)	48.2	34.9	38.1%
Nº of hours of online training	16,067.1	7,296.0	120.2%
Nº of hours of classroom training	115,650.8	85,741.0	34.9%

Occupational health and safety

In 2022, multiple projects and activities have been carried out with the aim of improving and consolidating the working conditions of Talgo employees and collaborators:

- Development of the documentary structure under the ISO 45001 reference standard, in order to be able to audit the system in the first half of 2023.
- Improvement in the monitoring of indicators at the level of the entire group and of the employees who work continuously at Talgo's facilities.
- Design and implementation of an occupational health and safety management process in the corporate management system with the necessary sub-processes and regulations. System developed under the specifications of the ISO 45001 standard.
- Design and implementation of a model of alliances with service providers to align health and safety cultures and minimise accident rates.

- Design and implementation of a method to identify incidents, accidents, sick leave, occupational diseases and hours worked in the supply chain (short-term, level 1).
- Follow-up and control of accidents at the main supplier reporting the highest levels of accidents, with reviews of the cause analysis and action plans derived from them.
- Study for the implementation of a possible "Social Welfare" system. Analysis of existing models, scope and international value. Development of initiatives, especially in the area of psychological support, to be included in a group-wide social welfare programme.
- Development of the accident investigation module in the 6 Connect tool.
- Implementation of the management tool in the countries of the CIS area and Arabia, as planned, with the inclusion of the rest of the subsidiaries for other years.
- Implementation of the new job-specific risk training courses.



4.3 Employees

In addition, a psychological, emotional and social care service for employees and their families called "We take care of you" has been launched. Since July, when the service began, it has handled 35 cases. This service was complemented by the celebration of "Mental Health Month", during which staff were made aware of mental health issues and efforts were mobilised to help improve mental health as a source of personal wellbeing. During the month of October, conferences related to suicide prevention, mental health and the management of emotions took place.

	2022	2021	Change
Nº Accidents (total)	188	197	-4.57%
Number of accidents with sick leave	53	43	23.26%
Frequency rate ⁽¹⁾	9.96	8.51	
Severity rate ⁽²⁾	0.22	0.25	
Deaths per accident	0	0	0%

Work/life balance

As part of the measures aimed at facilitating work/life balance, 77 employees took parental leave in 2022.

Other key measures implemented in 2022 include:

- Continuous working days for people from the manufacturing and maintenance areas.
- Flexible start and finish times, in addition to a reduced working day in summer for corporate offices.
- Subsidy of part of the cost of meals or equivalent assistance if there is no canteen at the centre, for people with a split working day.
- Staggering of annual holidays for certain groups.
- Detailed weekly and monthly information on working days, working hours and planned breaks.
- Annual medical check-up and flu vaccination campaigns.
- Private medical insurance coverage for international travel.
- Supplement of 100% of salary for temporary incapacity.

Since 2020 Talgo has implemented a voluntary remote working measure for those who are able to work remotely. It also offers employees the possibility of adapting their working hours in order to reconcile their personal lives.

Finally, Talgo has a digital disconnection measures agreement that guarantees the right to digital disconnection for all employees at the end of the working day.



	2022	2021	Change
Nº of employees on maternity leave	10	21	-52.4%
Nº of employees on paternity leave	67	128	-47.6%
Return to work rate (maternity)	70.0%	-	
Return to work rate (paternity)	92.5%	-	

(1) Industrial accidents per million hours worked. Talgo FTEs.

(2) Number of working days per 1,000 hours worked. Talgo FTEs.

4.4 Environment

The Talgo Group has a management system on which all environmental and sustainability measures are developed.

Products that drive the development of the circular economy and eco-design

Transparent and consolidated ems (based on ISO 14001)

Minimising impacts and improving sustainability

Fight against climate change

Development of the circular economy and eco-design

The manufacture of trains, based on eco-design, involves the use of materials with high recyclability and recoverability values. Activities carried out in the organisation in this area include the verification and publication of the Environmental Product Declaration (EPD) of the Talgo Avril model in 2022.

The most noteworthy results obtained in this first Environmental Product Declaration of the Talgo Avril for its configuration with 581 fixed-width seats are:

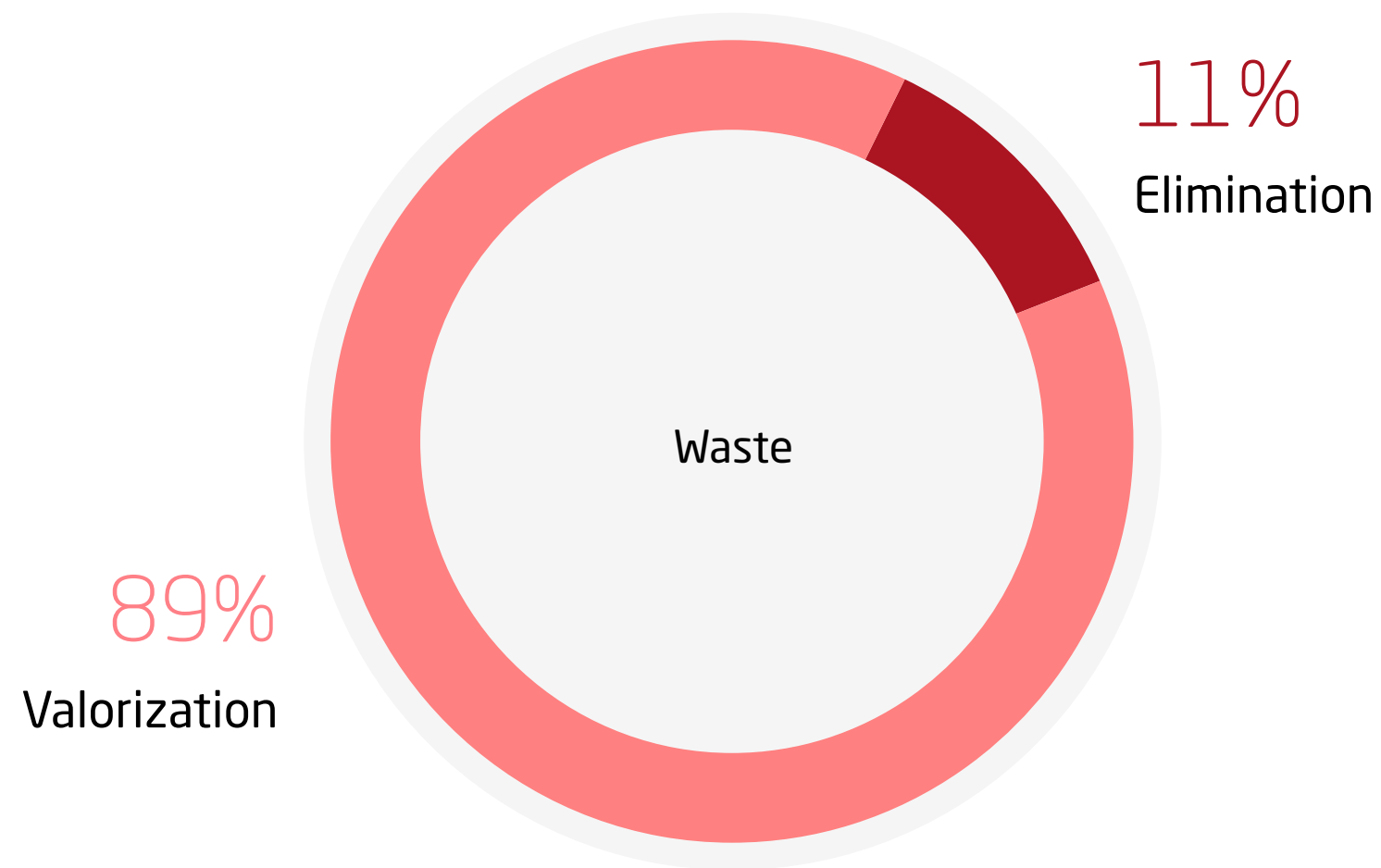
- A 93.8% recyclability rate of the materials that make up the train.
- A low level of carbon dioxide emissions during the use phase of the train, emitting 8.56 g of CO₂ equivalent per passenger kilometre. This value confirms Talgo Avril as the high/very high speed train with a published Environmental Statement with the lowest CO₂ emission levels.

Meanwhile, development continued in 2022 of a hybrid train allowing flexible operation (hydrogen or electric) designed for Talgo's commuter/Regional Vittal platform. A scalable solution with plug and play concept, which will also allow it to be applied in other train models and in conversions from diesel to hydrogen.

Talgo is committed to caring for the environment both in its management and in the creation of eco-sustainable products.

4.4 Environment

Another important aspect of the circular economy is the management of waste from train manufacturing and maintenance processes. The following graph shows the recovery rates (recycling, recovery, etc.) versus disposal of hazardous and non-hazardous waste generated in manufacturing activities:



Minimising environmental impacts and improving sustainability

As a factor in minimising Talگو's environmental impact, 100% of the energy consumed at the group's manufacturing centres in Spain comes from renewable sources. Along these lines, the installation of solar panels at Talگو-owned factories in Spain is planned for 2023 to promote self-consumption of energy.

Data and indicators	2022			2021			Change Consolidated
	Spain	Subsidiaries	Consolidated	Spain	Subsidiaries	Consolidated	
Sustainable operations and products							
1.- Energy consumption							
Electricity (kwh)	8,869,593	1,247,036	10,116,629.04	9,934,383	968,693	10,903,076.00	-7.2%
Electricity from renewable sources (%)	100%	N/D	N/D	100%	N/D	N/D	N/D
Electricity from non-renewable sources (%)	0%	N/D	N/D	0%	N/D	N/D	N/D
Fuels: natural gas boilers (KWH*)	6,663,219.0	244,582.6	6,907,801.6	7,439,085.0	193,756.7	7,632,841.7	-9.5%
Fuels: automotive diesel (m³)	30.9	N/D	N/D	48.25	N/D	N/D	-35.9%
Fuels: boiler oil (m³)	88.0	4.6	92.5	231.7	N/D	231.7	-150.0%
Energy intensity (kWh/employee)	11,972	14,688	26,660	15,283	11,742	27,025	-1.0%
2.-Consumption of materials and other products							
Paper (t)	9.9	N/D	N/D	8.7	N/D	N/D	N/D
Water consumed (m³)	16,391.3	1,163.8	17,555.1	21,986.3	-	21,986.3	-20.1%
Solvents and paints (t)	26.9	N/D	26.9	31.9	N/D	31.9	-15.7%

4.4 Environment



Data and indicators	2022			2021			Change Consolidated
	Spain	Subsidiaries	Consolidated	Spain	Subsidiaries	Consolidated	
Sustainable operations and products							
3.- Waste management							
Hazardous waste generated (t)	156.6	6.3	162.9	189.1	N/D	N/D	-13.9%
Hazardous waste for recycling (t)	45.2	N/D	N/D	45.8	N/D	45.8	-1.3%
Hazardous waste for reuse (t)	34.2	N/D	N/D	35.4	N/D	N/D	2%
Hazardous waste for other valorisation operations (t)	11.6	N/D	N/D	18.1	N/D	N/D	35.9%
Hazardous waste for incineration with energy recovery (t)	6.3	N/D	N/D	5.2	N/D	N/D	21.1%
Hazardous waste for incineration without energy recovery (t)	0.0	N/D	N/D	0.0	N/D	N/D	N/D
Hazardous waste for landfill (t)	33.7	N/D	N/D	32.5	N/D	N/D	3.7%
Hazardous disposal for other disposal operations (t)	25.4	N/D	N/D	51.0	N/D	N/D	-50.2%
Non-hazardous waste generated (t)	1,640.5	90.36	1,730.83	2,114.0	N/D	N/D	-18.1%
Non-hazardous waste for recycling (t)	1,389.5	6.3	162.9	1,721.5	N/D	N/D	-19.3%
Non-hazardous waste for reuse (t)	0.0	N/D	N/D	0.0	N/D	N/D	0%
Non-hazardous waste for other valorisation operations (t)	142.7	N/D	N/D	392.5	N/D	N/D	-63.6%
Non-hazardous waste for incineration with energy recovery (t)	0.0	N/D	N/D	0.0	N/D	0.0	N/D
Non-hazardous waste for incineration without energy recovery (t)	0.0	N/D	N/D	0.0	N/D	0.0	N/D
Non-hazardous waste for landfill (t)	86.7	N/D	N/D	N/D	N/D	N/D	N/D
Non-hazardous disposal for other disposal operations (t)	21.52	N/D	N/D	N/D	N/D	N/D	N/D

(1) The program and environmental projects have corporate scope (parent and all subsidiaries)
 (N/A) Data not available.
 The maintenance centers of the subsidiaries are owned by the client companies and several other companies work in their facilities, in addition to Talgo.

4.4 Environment

Transparent and consolidated Environmental Management System

Talgo's Environmental Management system has been certified since 2003 in accordance with the UNE-EN ISO 14001 standard, the scope of which covers all activities carried out by Talgo in Spain.

To ensure environmental protection, Talgo applies the principle of prevention, provision and guarantee through the following actions:

- Proper waste management by authorised waste managers.
- Update and review of environmental legislation and compliance thereof.
- Conduct of internal and external audits.
- Maintenance of sewage treatment plants.
- Analysis of wastewater.
- Improvement of processes with environmental impact to prevent pollution.
- Training and awareness-raising of the involved partners.

Talgo has an environmental liability insurance policy pursuant to Spanish Law 26/2007, of 23 October, on Environmental Liability, by which economic or professional operators covered by the law are obliged to adopt and implement measures to prevent, avoid and repair environmental damage and to cover the costs thereof when they are responsible for such damage, whatever the amount. The coverage of this insurance is considered sufficient taking into account the diagnosis of risks and controls to mitigate them that the Group has in place. In addition, there is a civil liability insurance for environmental damage.

Data and indicators	2022			2021			Change Consolidated
	Spain	Subsidiaries	Consolidated	Spain	Subsidiaries	Consolidated	
Environmental management: strategy, deployment and system							
Fulfilment of the annual environmental programme	N/A	N/A	67.0%	N/A	N/A	75.0%	-10.7%
No. of environmental projects implemented ⁽¹⁾	N/A	N/A	2	N/A	N/A	1	100%
Environmental investments (€)	105,713	102,911	208,623	291,252	N/D	291,252	28.4%
Scope of the environmental management system (% of persons)	84%	N/D	74 %	84%	N/D	74%	0%
Rate of implemented corrective and preventive actions	4	N/A	4	4	N/A	4	0%
Environmental accident rate	0	0	0	0	0	0	0%
Costs of managing expired products (€)	132,040	N/A	132,040	132,859	N/D	132,859	-0.6%
Deviations in internal and external audits closed after the deadline	0	N/A	0	0	N/A	0	0%
Environmental compliance							
Environmental fines for non-compliance or other reasons	0	0	0	0	0	0	0%
Environmental sanctions, proceedings and arbitration	0	0	0	0	0	0	0%

4.4 Environment

Combating climate change

In 2022, Talgo set a global target of reducing direct emissions per unit of production by 5%, as part of its commitment to the need to control and reduce the greenhouse gas emissions it generates in the course of its activities.

To monitor greenhouse gas (GHG) emissions and identify improvements to reduce them, an annual carbon footprint report is drawn up based on the GHG Protocol methodology. Emissions are thus expressed in kilograms of carbon dioxide equivalent.

For the calculation of emissions generated during the year 2022, the Calculator of the Ministry for Ecological Transition and Demographic Challenge (MITECO) is used together with the emission factors defined in the National Greenhouse Gas Inventory (1990/2006 - 1990/2020).

GHG reduction measures



Scope 1

Improved insulation in manufacturing centres to reduce natural gas consumption, elimination and/or replacement of generators identified as a major source of GHG emissions.

Scope 2

Maintain the 100% renewable origin of electrical energy consumed in the centres.

Scope 3

increase the service provided to the organisation's staff to travel to work centres by means of company buses and, additionally, by providing a carpooling app to encourage carpooling.

Data and indicators	2022	2021	Change
Climate Action			
CO ₂ emissions: factories and workshops. Scope 1 (tCO ₂ eq)	1,765	2,369	-25.5%
CO ₂ emissions: indirect. Scope 2 (tCO ₂ eq)	323	251	28.7%
CO ₂ emissions: other indirect. Scope 3 (tCO ₂ eq)	N/D	N/D	6.9%
GHG emissions intensity Scope 1+2 (tCO ₂ eq/employee)	4.78	4.57	4.6%
GHG emission intensity Scope 3 (tCO ₂ eq/employee)	N/D	N/D	6.7%
Emission of substances affecting the ozone layer (kg)	0	11.72	-100%

Data and indicators	2022	2021	Change
Electricity (kwh)	10,116,629.04	10,903,076.00	-7.2%
Electricity from renewable sources (%)	100% (*)	100% (*)	0% (*)
Electricity from non-renewable sources (%)	0% (*)	0% (*)	0% (*)
Fuels: natural gas boilers (KWH*)	6,907,801.6	7,632,841.7	-9.5%
Fuels: automotive diesel oil (m ³)	30.9 (*)	48.2(*)	-35.9% (*)
Fuels: boiler oil (m ³)	92.5	231.7	-150%
Energy intensity (kWh/employee)	26,660.0	27,024.9	-1%
Paper (t)	9.9% (*)	8.7 (*)	13.7%
Water consumed (m ³)	17,555.1	21,986.3	-20.1%
Solvents and paints (t)	26.9	31.9	-15.7%

(*) Data for Spain only. Subsidiaries N/A.

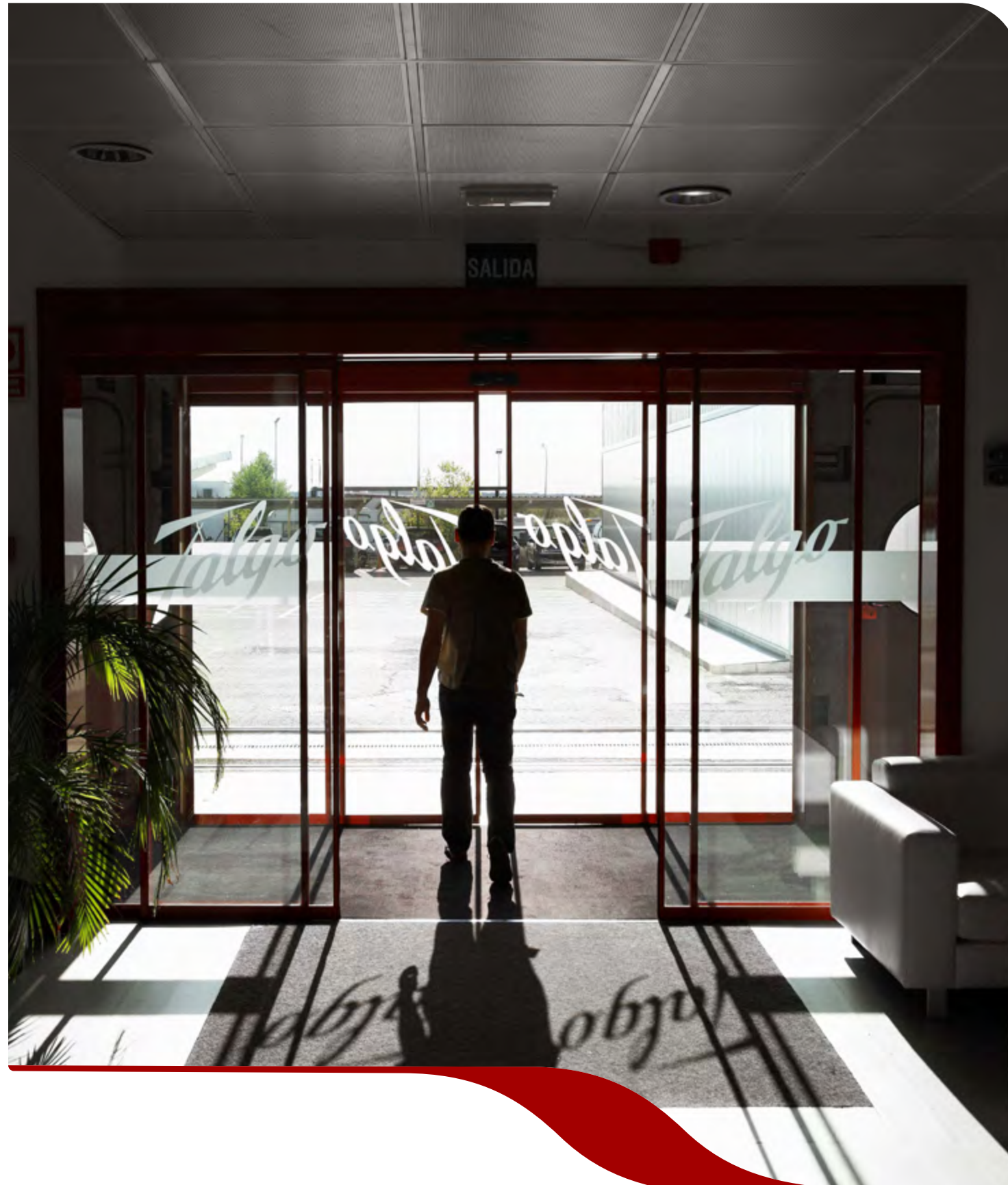
4.4 Environment

Care for biodiversity

In addition to the above, Talgo is committed to the care and protection of biodiversity. It aims to ensure that its activities are compliant with applicable legal requirements, and to promote a high level of environmental awareness among its workforce. A clear example is the Las Matas 2 centre, which borders a Protected Natural Area (PNA), namely the Cuenca Alta del Río Manzanares Regional Park, without causing damage to the biodiversity contained in this therein as a result of the exhaustive control of emissions, discharges and waste resulting from the activity carried out at this centre.



4.5 Suppliers



The newly implemented “Procurement” organisation is responsible for this element of the Talgo Group’s value chain and the purchasing policy underpins its actions with due attention to social, labour (including equality and equity), ethical and environmental issues.

The new multiannual Strategic Procurement Plan (PEC) 2022-2026 contains the main lines of action, strategies and initiatives to achieve the vision of the plan by 2026. This is reviewed on a quarterly basis, verifying the degree of compliance with the objectives in the short/medium/long term and adapting them or taking mitigating measures if deemed necessary, and is linked to the suppliers’ continuous improvement programmes (certification audits and reassessment audits).

Approval of suppliers

The supplier approval process is regulated by procedure PA07-09, which assesses technical competence and the level of commitment to sustainability (human rights, environmental and social) by systematically studying any new supplier in aspects such as the environment, ethics and sustainability governance and adherence to Talgo’s Code of Ethics.

One of the key elements in Talgo’s relationship and participation frameworks with its suppliers is the Supplier Manual. This document is the main vehicle for training suppliers in process description, quality requirements, continuous improvement and responsible purchasing.

The following were most noteworthy aspects of these processes in 2022:

- The continuation within the procurement management system of active supplier risk registers for monitoring.
- Contracting of the project for installation of photovoltaic panels at the production centres, with medium- to long-term amortisation models and the possibility of arranging a Purchase Power Agreement (PPA).
- The use of Mintec as an information portal on commodity price fluctuations.
- The use of Qlik Sense as a comprehensive support tool for indicators and BSC.
- The development of a Purchasing/Supplier Portal, which allows the management of:
 - orders, electronically,
 - contracting/purchasing requests via internal customers,
 - bids to third parties, leading to the subsequent negotiation and subsequent contracting of the requested materials and/or services,
 - delivery/invoicing/collection flows,
 - approval and re-evaluation of suppliers in accordance with the processes and procedures established for this purpose.

4.5 Suppliers

Data and indicators	2022	2021	Change
Gestión de proveedores y cadena de suministro			
Suppliers and other GGII (*) total assets as at 1 January (criticality 1 and 2).	1,875	1,792	4.6%
Total purchases: (€)	276,704,364	323,325,092	-14.4%
Purchasing from local suppliers: (€)	195,989,588	251,968,897	-22.2%

(*) Purchase-related

Data and indicators	2022	2021
Geographical distribution of goods and services		
Spain	71.4%	79.0%
Other Europe	13.6%	13.6%
Americas	6.1%	2%
Commonwealth of Independent States*	1.9%	1.3%
Middle East and North Africa	5.4%	1.8%
APAC**	1.6%	2.4%



4.5 Company

The main mechanism and organiser of the Group's social action is the Talgo Foundation, which was established in 2013 with the aim of contributing to meeting global and national challenges in the social sphere. All the information on its management and results is contained in annual reports, which can be found at www.fundaciontalgo.com

In 2022, Talgo's total investment in social action projects increased by 4.6%, exceeding 330,000 euros in a total of 30 initiatives (10 more than in 2021). It is estimated that the direct impacts achieved in the Company reached 15,000, representing a tremendous advance compared to 2021 (2018) for Talgo in its role as a force for the improvement of its immediate social and economic surroundings.

Data and indicators	2022	2021	Change
Social action			
Total investment in projects (€):	332,331	317,540	4.6%
Nº of projects	30	20	50.0%
Nº of awards	21	6	250%
Nº of scholarships	343	784	-56.2%
Estimated direct impacts	15,000	2,018	643.3%

Promoting education, training and qualification

Focused on professional development, technology and innovation in the railway sector as drivers of change, activities in 2022 included:

- Collaboration with a vocational training centre in Kazakhstan for the training of young Kazakh girls.
- Creation of the Aula Talgo, a project led jointly with the School of Industrial Engineering of the Polytechnic University of Madrid, which contributes to teaching, dissemination, research and technology transfer in the field of railway engineering.
- Lending visibility to women in the world of railway technology,
- Collaboration with the CSIC in the stimulation of scientific talent,
- Promotion of vocational training as an employment-oriented educational alternative of excellence.

At the same time, Talgo continued to promote Science, Technology, Engineering and Mathematics (STEM) qualifications. This was pursued through collaboration with different training entities and non-profit organisations that enable Group staff to serve as a reference point for training and professional experience for students at different educational levels. Accordingly, 343 study grants were awarded to people from different vulnerable sectors and groups, among others, to offer qualifications and professional skills in railway technology, leadership and business management.

Development of culture, art and history for the promotion of cultural values

In the year of its 80th birthday, many of the Group's activities also focused on promoting knowledge of Talgo technology, its history and its impact on society. One example is the collaboration with IED Madrid on an educational project to design new models of tourism based on the use of low-use regional railways for the recovery of local culture, the rural economy and the preservation of historical and landscape heritage.

Support for diversity and social equality

As it does every year, Talgo promoted and supported in 2022 the celebration of special dates related to women, people with disabilities, people at risk of exclusion and other disadvantaged groups through initiatives to raise awareness, sponsorship of women at risk of exclusion, and participation in employment workshops with the aim of providing people from these groups with the necessary tools to find employment aimed at their social inclusion. These actions have been carried out with organisations such as Prodis, Fundación Adecco, etc.

Also, 21 prizes were awarded, compared to six in 2021, where the objective is to foster and make visible the importance of women in the world of engineering, highlight innovation as a driver of business growth and promote the profession of welder in the manufacturing sector.

4.5 Company

Social action and human rights

An essential part of Talgo's social action model is the Group's volunteer work, which this year amounted to more than 2,100 hours of social work by company employees and those close to them who took part in the proposed activities.

Once again, this year, the "Involved in a different Christmas", made up of different solidarity initiatives, sought to raise awareness and involve all Talgo staff members in solidarity activities such as:

- "Great 2023 Food Drive": virtual campaign for employees to make donations (Burgos and Madrid).
- The "Talgo Awards 2022", voted for by employees themselves, acknowledge the role played by certain colleagues during the year.
- Christmas card competition for employees' children and in the Las Matas Parade of the Three Wise Men.

In addition, the strategic collaboration continued with the Association of Supportive Writers (*Asociación de Escritores Solidarios*) (NGO) to participate in the Five Words literacy project in Africa.

Data and indicators	2022	2021	Change
Corporate volunteering			
Internal participants: number and hours spent	30 450	24 760	25.0% -40.8%
External participants: number and hours spent	102 1,667	106 525	-3.8% 217.5%



The image shows the interior of a Talgo train carriage, characterized by its unique tubular design. The ceiling is a complex network of metal beams and supports, with a central track for the overhead power system. The walls are made of metal panels with several rectangular windows. The floor is also metal, with a central aisle. The overall appearance is industrial and functional.

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